Приготовление геля для электрофореза

Технические характеристики

Виды товаров: наборы для подготовки геля, наборы акриламида, реагенты для подготовки геля, загрузочные буферы, белковые маркеры, электрофорезные буферы.

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Servicebio® SDS-PAGE Gel Preparation Kit

Cat #: G2003-50T

Product Information

Product Name	Cat.No.	Spec.	
SDS-PAGE Gel Preparation Kit	G2003-50T	50 T	

Product Description/Introduction

The SDS-PAGE gel preparation kit contains all reagents required for gel preparation. Users only need to prepare a small amount of pure water and gel making equipment (glue making base, glass plate, comb, etc.), and follow the instructions to produce the required gel. This kit can prepare at least 50 regular size gels.

Storage and Shipping Conditions

Ship with wet ice; Modified coagulant stored at -20 $^\circ\! \mathbb C$, others stored at 2-8 $^\circ\! \mathbb C$ away from light, valid

for 12 months.

Product Components

Component Number	Component	G2003-50T
G2003-1	1.5 M Tris-HCl(pH 8.8)	100 mL
G2003-2	30% Acrylamide-Bisacrylamide (29:1)	100 mL
G2003-3	1.0 M Tris-HCl (pH 6.8)	20 mL
G2003-4	10% SDS	5 mL
G2003-5	PAGE gel solidification catalyst	1 mL
G5036-5ML	1 mL×5	
	1 pc	

Assay Protocol/Procedures

1. According to the molecular weight of the target protein and the selected electrophoresis buffer, select the appropriate concentration of SDS-PAGE separation gel, as shown in the table below:

SDS-PAGE Separation Gel Concentrations	Optimum separation range (kDa) (Tris-Glycine electrophoresis buffer, G2018)	Optimum separation range (kDa) (SWE Fast High Resolution Electrophoresis Buffer, G2081)
6%	50-300	15-300
8%	30-130	10-250
10%	20-100	5-150
12%	10-60	3-100
15%	<40	<60

2. According to the molecular weight of the target protein, the concentration of the separation gel was



selected. Taking the common specification of 8.3 cm×7.3 cm gel plate (single block) as an example, the gel preparation solution could be prepared according to the following table:

Separation Gel Concentrations (%)		6%			8%			10%			12%			15%	
Glass Plate Thickness	0.75 mm	1.0 mm	1.5 mm												
Total volume of glue required* (mL)	4.0	6.0	8.0	4.0	6.0	8.0	4.0	6.0	8.0	4.0	6.0	8.0	4.0	6.0	8.0
H_2O (mL)	2.1	3.18	4.24	1.85	2.78	3.7	1.59	2.38	3.17	1.32	1.98	2.64	0.92	1.38	1.84
30% Acrylamide-Bisa crylamide (29:1) (mL)	0.8	1.2	1.6	1.07	1.6	2.14	1.33	2.0	2.67	1.6	2.4	3.2	2.0	3.0	4.0
1.5 M Tris-HCl (pH 8.8) (mL)	1.0	1.5	2.0	1.0	1.5	2.0	1.0	1.5	2.0	1.0	1.5	2.0	1.0	1.5	2.0
10% SDS (µL)	40	60	80	40	60	80	40	60	80	40	60	80	40	60	80
Modified Coagulant (µL)	40	60	80	40	60	80	40	60	80	40	60	80	40	60	80
PAGE gel solidification catalyst (μL)	4.0	6.0	8.0	4.0	6.0	8.0	4.0	6.0	8.0	4.0	6.0	8.0	4.0	6.0	8.0

* The total volume of the gel preparation solution does not include the volume of PAGE gel solidification catalyst

3. The preparation of stacking gel can refer to the following table:

Stacking Gel Concentrations(%)	5%				
H ₂ O (mL)	1.93	2.95	3.86	5.79	
30% Acrylamide-Bisacrylamide (29:1) (mL)	0.5	0.75	1.0	1.5	
1.0M Tris-HCl (pH 6.8) (mL)	0.5	0.75	1.0	1.5	
10% SDS (μ L)	40	60	80	120	
Modified Coagulant (μL)	18	27	36	54	
PAGE gel solidification catalyst (μL)	4	6	8	12	
Total volume* (mL)	3	4.5	6.0	9.0	

* The total volume does not include the PAGE gel solidification catalyst volume.

4. Recommended electrophoretic conditions:

a) Using SWE fast high-resolution electrophoresis buffer (G2081) for electrophoresis: 200-250 V constant pressure, 25-35 min to complete the electrophoresis;

b) Tris-Glycine electrophoresis buffer (G2018) is used for electrophoresis: the voltage of the upper gel is set at 90 V, and electrophoresis lasted for about 30 min (marker entered the separating gel); The adjustment voltage of the lower gel is 150-180 V, about 60-90 min (can be adjusted according to the actual situation).



Note

- 1. All reagents should be rewarmed to room temperature before use.
- 2. Compared to ammonium persulfate (AP), the improved coagulant has better stability. Take out one for use a nd store it at 4°C after use for subsequent routine use, which can be stored for six months. If not used for a long time, please store it at -20°C to avoid repeated freezing and thawing.
- 3. Tricine gel is recommended for protein separation smaller than 10 kDa; acrylamide gels may not be sufficient for separation.
- 4. Temperature has a significant impact on the gelation time of the adhesive. To ensure smooth experiment progress, generally, lower temperatures result in longer gelation times, and it may be necessary to increase the dosage of the modified coagulant accordingly. On the other hand, higher temperatures lead to faster gelation, so the dosage of the modified coagulant can be reduced accordingly.
- 5. The gel needs sufficient solidification time, and it is recommended that the gel be fully prepared and left to ensure that the it gels thoroughly.
- 6. When the temperature is low, 10% SDS solution has crystallization precipitation, and can be used after remelting at 37℃.
- If you need a fast gel preparation set of reagents, you can buy other products of our company, such as SDS-PAGE Fast Acrylamide Kit (G2037), or super-fast color gel preparation kit series (G2041 / G2042 / G2043 G2044 / G2045 / G2060 / G2061 / G2062 / G2063 / G2064), And high resolution ultra-fast color gel preparation kit series (G2066/G2067/G2068, G2071/G2072/G2073), can meet different experimental needs.
- 8. For your safety and health, please wear a lab coat and disposable gloves when operating.



Servicebio[®] SDS-PAGE Fast Acrylamide Kit

Cat #: G2037-50T

Product Information

Product Name	Cat. No.	Spec.
SDS-PAGE Fast Acrylamide Kit	G2037-50T	50 T

Product Description/Introduction

This kit provides a simple and fast SDS-PAGE gel preparation solutions. It contains all the reagents needed for gel preparation, users only need to prepare a small amount of pure water and gel preparation equipment (gel base, glass plate, comb, etc.) and follow the instructions to produce the required gel in a short time. This kit can prepare at least 50 regular sized gel.

Storage and Shipping Conditions

Ship with wet ice; Modified coagulant stored at -20 $^\circ\!C$, others stored at 2-8 $^\circ\!C$ away from light, valid for 12 months.

Component Number	Component	G2037-50T		
G2037-1	30% acrylamide (29:1)	100 mL		
C2027 2	4×Tris-SDS Lower Separating Gel	100		
62037-2	Solution	100 IIIL		
C2027 2	4×Tris-SDS Upper Stacking Gel	20 ml		
02037-5	Solution	SUTIL		
G2037-4	PAGE gel solidification catalyst	1 mL		
G5036-5ML	Modified Coagulant	1 mL×5		
Manual		One copy		

Product Components

Assay Protocol/Procedures

1. Choose appropriate Concentration of acrylamide solution according to molecular weight of target protein;

SDS-PAGE separating gel concentration	The optimal Separation range (kDa) (Tris-Glycine running buffer, G2018)	The optimal Separation range (kDa) (SweRapid-High Resolution running buffer, G2018)
6%	50-300 kDa	15-300 kDa
8%	30-130 kDa	10-250 kDa
10%	20-100 kDa	5-150 kDa
12%	10-60 kDa	3-100 kDa
15%	< 40 kDa	< 60 kDa

The concentration of the separating gel was selected according to the molecular weight size of the target protein, take the gel plate (single piece) with common specifications of 8.3 × 7.3 cm as an example, the following table can be referred to for the preparation of the gel solution:

Concentration	6%	8%	10%	12%	15%
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of separating gel(%)															
Glass plate thickness (mm)	0.7 5 mm	1.0 mm	1.5 mm												
The total volume of gel solution* (mL)	4.0	6.0	8.0	4.0	6.0	8.0	4.0	6.0	8.0	4.0	6.0	8.0	4.0	6.0	8.0
$H_2O\ (mL)$	2.1 6	3.2 4	4.3 2	1.8 9	2.8 4	3.7 8	1.6 3	2.4 4	3.2 5	1.3 6	2.0 4	2.7 2	0.9 6	1.4 4	1.9 2
30% acrylamide(29:1) (mL)	0.8	1.2	1.6	1.0 7	1.6	2.1 4	1.3 3	2.0	2.6 7	1.6	2.4	3.2	2.0	3.0	4.0
4 x Tris-SDS Lower Separating Gel Solution (mL)	1.0	1.5	2.0	1.0	1.5	2.0	1.0	1.5	2.0	1.0	1.5	2.0	1.0	1.5	2.0
Modified Coagulant (μL)	40	60	80	40	60	80	40	60	80	40	60	80	40	60	80
PAGE gel solidification catalyst (µL)	4.0	6.0	8.0	4.0	6.0	8.0	4.0	6.0	8.0	4.0	6.0	8.0	4.0	6.0	8.0

*The total volume of the gel solution does not include the volume of PAGE gel solidification catalyst.

3. Prepare the Upper Stacking Gel by referring to the following table:

Concentration of Upper Stacking Gel	5%			
H ₂ O/mL	1.75	2.63	3.5	5.25
30% acrylamide (29:1)/mL	0.5	0.75	1	1.5
4 x Tris-SDS Upper Separating Gel Solution/mL	0.75	1.13	1.5	2.25
Modified Coagulant/µL	18	27	36	54
PAGE gel solidification catalyst/μL	4	6	8	12
Total volume/mL	3	4.5	6	9

*The total volume does not include the volume of PAGE gel solidification catalyst.

- 4. The recommended electrophoresis conditions:
 - a) Use SweRapid-High Resolution running buffer (G2018) at constant voltage of 200-250 V for 25-35 min.

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b) Or use Tris-Glycine running buffer (G2018). The upper gel is set at a voltage of 90 V, and electrophoresis is performed for about 30 min (marker entered the separation gel). The voltage of the lower gel is adjusted to 150-180 V, about 60-90 min (Adjust according to the actual situation).

Note

- 1. Too large a temperature difference in the process of making glue heat production may produce bubbles, it is recommended that the glue is ready to return to room temperature, and then add the improved coagulant for gelation, which can effectively avoid the formation of small bubbles in the gelation process.
- 2. The modifiedhas better stability compared to ammonium persulfate (AP). Take out one for u se, and store it at 4° C after use for subsequent routine use, which can be stored for six mont hs. If not used for a long time, please store it at -20° C to avoid repeated freezing and thawin g.
- 3. Tricine gel is recommended for protein separations smaller than 10 kDa; acrylamide gels may not be sufficient for separation.
- 4. Temperature has a significant impact on the gelation time of the adhesive. To ensure smooth experiment progress, generally, lower temperatures result in longer gelation times, and it may be necessary to increase the dosage of the modifiedcoagulant accordingly. On the other hand, higher temperatures lead to faster gelation, so the dosage of the modified coagulant can be reduced accordingly.
- 5. Adequate gelation time is needed, and it is recommended to allow the gel to sit undisturbed to ensure thorough gelation.
- 6. When the temperature is low, buffer solutions for separating gel and concentrated gel may crystallize due to the presence of SDS solution. They can be rewarmed at 37° C and then used after melting.
- 7. If there is a need for super-fast and high-resolution gel preparation reagents, you can purchase our company's other products: Super Fast Colorful Gel Preparation Reagent Kit Series (G2041/G2042/G2043/G2044/G2045,G2060/G2061/G2062/G2063/G2064),and High-Resolution Super Fast Colorful Gel Preparation Reagent Kit Series (G2066/G2067/G2068, G2071/G2072/G2073), which can meet different experimental needs.
- 8. Please wear lab coat and disposable gloves during operation.



Servicebio® Fast-Cast Colorful (Red) Acrylamide Kit,6%

Cat #: G2041-50T

Product Information

Product Name	Cat. No.	Spec.
Fast-Cast Colorful (Red) Acrylamide Kit,6%	G2041-50T	50 T (1.0 mm Glass Plates)

Product Description/Introduction

This kit provides a simple and rapid preparation of 6% PAGE coloured (red) gels, enabling the simultaneous preparation of both lower (separated) and upper (also known as stacking) gels, allowing the user to prepare protein gels quickly by simply preparing the gel preparation equipment. At the same time, the kit contains a red dye in the stacker B, which makes it possible to visualise the spiking process and greatly improves the spiking efficiency. The red dye is stable in the upper gel and does not migrate to the lower gel with electrophoresis, thus not affecting the electrophoresis and staining effect. It is also easy to identify and excise the upper gel after electrophoresis is completed, without affecting subsequent experiments such as Western Blot. This reagent kit uses an modifed coagulant, which can solidify the gel without the need to add TEMED (a toxic reagent with a foul odor) when preparing the gel. The gels prepared in this kit can also be used for non-denaturing PAGE gel electrophoresis.

This kit prepares 50 gels of regular size, the number of gels prepared depends on the thickness of the gel and the size of the gel.

Storage and Shipping Conditions

Ship with wet ice; Modified coagulant stored at -20 °C, others stored at 2-8 °C away from light, valid for 12 months.

Component Number	Component	G2041
G2041-1	Stacker A	50 mL
G2041-2	Stacker B (Red)	50 mL
G2041-3	6% Resolver A	125 mL
G2041-4 6% Resolver B		125 mL
G5036-5ML Modified coagulant		1 mL*5
Manual		1 pc

Product Components

Assay Protocol/Procedures

1. Choose appropriate Concentration of PAGE resolver (separation gel) according to molecular weight of target protein, refer to the table below:

PAGE Separating Gel Best separation range (kDa) Best separation range (kDa) (SWE
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Concentration	(Tris-Glycine Buffer, G2018)	Fast High-Resolution	
		Electrophoresis Buffer, G2081)	
6%	50-300	15-300	
8%	30-130	10-250	
10%	20-100	5-150	
12%	10-60	3-100	
15%	<40	<60	

2. According to the experimental requirements, mix solution A and B in equal proportion, add appropriate amount of modified coagulant, and prepare the resolving solution and stacking solution respectively. Different specifications and different thickness of the glass plate can be adjusted in equal proportions to the stacking solution and resolving solution preparation volume, to the commonly used specifications of 8.3 cm × 7.3 cm gel plate (single), for example, the recommended preparation system is as follows table:

Configuration Groups	Component	0.75 mm Glass Plates	1.0 mm Glass Plates	1.5 mm Glass Plates
Resolver	6% Resolver A	2 mL	2.5 mL	4 mL
	6% Resolver B	2 mL	2.5 mL	4 mL
	Modified coagulant	24 µL	30 µL	48 µL
Stacker	Stacker A	1 mL	1 mL	1.5 mL
	Stacker B (Red)	1 mL	1 mL	1.5 mL
	Modified coagulant	12 μL	12 μL	18 µL

3. After assembling the gel tool, first add the prepared resolver, then use distilled water or ethanol and other solutions to seal the surface of the resolver, wait until the resolver to solidify sufficiently (about 10-15 min), discard the water or ethanol, and use the filter paper to suck up the residual water or ethanol, and then add the prepared stacker, insert the comb, and wait until it is solidified (about 10-15 min), and then can be used; or in the stacker can be added to join the prepared resolver immediately and slowly, uniformly added to the upper layer of the gel solution prepared, and insert the comb, and wait until it is solidified (about 10-15 min), and then can be used.

- 4. If the prepared gel cannot be used on the same day, it can be stored at 4°C for 1-2 days.
- 5. Recommended electrophoresis conditions:

a. Use SWE Fast High-Resolution Electrophoresis Buffer (G2081) for electrophoresis: 200-250 V, 25-35 min.

b. Use Tris-Glycine Electrophoresis Buffer (G2018) for electrophoresis: upper gel 90 V, about 30 min (marker enters separation gel); lower gel 150-180 V, about 60-90 min (can be adjusted according to actual situation).



Notes:

- 1. Too large a temperature difference in the process of making gel heat production may produce bubbles, it is recommended that A, B premixed solution is ready to return to room temperature, and then add modified coagulant for gelation, which can effectively avoid the formation of small bubbles in the gelation process.
- 2. The modified coagulant has better stability than ammonium persulfate (AP). After use, take out one and store it at 4°C for subsequent regular use. It can be stored for six months. If not used for a long time, please store it at -20°C to avoid repeated freezing and thawing.
- 3. The stacker B may produce flocculent precipitation after being left still for a long time. Please gently shake it before use to mix it evenly.
- 4. There is monomer acrylamide in the premixed solution, which is harmful to the human body. Please pay attention to protective measures during operation.
- 5. To ensure that the sample enters the separation gel at the same time, when directly casting the stacker, slowly and evenly add the prepared stacker.
- 6. After adding the modified coagulant, cast the gel as soon as possible and do not leave it for a long time.
- 7. Temperature has a significant effect on the solidification time of the gel. To ensure the smooth progress of the experiment, the lower the temperature, the longer the solidification time, and the amount of improved coagulant should be appropriately increased. The higher the temperature, the faster the gel solidifies, and the amount of improved coagulant can be appropriately reduced.
- 8. If you need to further accelerate the gel speed, add an appropriate amount of TEMED before casting the gel and increase the amount of modified coagulant by 0.5 times as needed.
- 9. We also provide other colored (green, yellow, blue) sracker to distinguish different samples for gel electrophoresis.
- 10. For your safety and health, please wear laboratory clothes and disposable gloves during operation.



Servicebio® Fast-Cast Colorful (Red) Acrylamide Kit, 8%

Cat #: G2042-50T

Product Information

Product Name	Cat. No.	Spec.
Fast-Cast Colorful (Red) Acrylamide Kit, 8%	G2042-50T	50 T (1.0 mm Glass Plates)

Product Description/Introduction

This kit provides a simple and rapid preparation of 8% PAGE coloured (red) gels, enabling the simultaneous preparation of both lower (separated) and upper (also known as stacking) gels, allowing the user to prepare protein gels quickly by simply preparing the gel preparation equipment. At the same time, the kit contains a red dye in the stacker B, which makes it possible to visualise the spiking process and greatly improves the spiking efficiency. The red dye is stable in the upper gel and does not migrate to the lower gel with electrophoresis, thus not affecting the electrophoresis and staining effect. It is also easy to identify and excise the upper gel after electrophoresis is completed, without affecting subsequent experiments such as Western Blot. The gels prepared in this kit can also be used for non-denaturing PAGE gel electrophoresis. This kit prepares 50 gels of regular size, the number of gels prepared depends on the thickness of the gel and the size of the gel.

Storage and Shipping Conditions

Ship with wet ice; Modified coagulant stored at -20°C, others stored at 2-8°C away from light, with a shelf life of 12 months.

Component Number Component		G2042-50T
G2042-1	Stacker A	50 mL
G2042-2	Stacker B (Red)	50 mL
G2042-3	8% Resolver A	125 mL
G2042-4	8% Resolver B	125 mL
G5036-5ML Modified coagulant		1 mL*5)
Manual		1 pc

Product Components

Assay Protocol/Procedures

1. Choose appropriate Concentration of PAGE resolver (separation gel) according to molecular weight of target protein, refer to the table below:

PAGE Separating Gel Concentration	Best separation range (kDa) (Tris-Glycine Buffer, G2018)	Best separation range (kDa) (SWE Fast High-Resolution Electrophoresis Buffer, G2081)
6%	50-250 kDa	15-300
8%	30-130 kDa	10-250
10%	20-100 kDa	5-150
12%	10-60 kDa	3-100
15%	< 40 kDa	<60

2. According to the experimental requirements, mix solution A and B in equal proportion, add



appropriate amount of modified coagulant, and prepare the resolving solution and stacking solution respectively. Different specifications and different thickness of the glass plate can be adjusted in equal proportions to the stacking solution and resolving solution preparation volume, to the commonly used specifications of 8.3 cm \times 7.3 cm gel plate (single), for example, the recommended preparation system is as follows table:

Proparation group	Component	0.75 mm Glass	1.0 mm Glass	1.5 mm Glass
Freparation group	component	Plates	Plates	Plates
	8% Resolver A	2 mL	2.5 mL	4 mL
Resolver	8% Resolver B	2 mL	2.5 mL	4 mL
	Modified coagulant	24 μL	30 µL	48 µL
Stacker	Stacker A	1 mL	1 mL	1.5 mL
	Stacker B (Red)	1 mL	1 mL	1.5 mL
	Modified coagulant	12 μL	12 µL	18 µL

- 3. After assembling the gel tool, first add the prepared resolver, then use distilled water or ethanol and other solutions to seal the surface of the resolver, wait until the resolver to solidify sufficiently (about 10-15 min), discard the water or ethanol, and use the filter paper to suck up the residual water or ethanol, and then add the prepared stacker, insert the comb, and wait until it is solidified (about 10-15 min), and then can be used; or in the stacker can be added to join the prepared resolver immediately and slowly, uniformly added to the upper layer of the gel solution prepared, and insert the comb, and wait until it is solidified (about 10-15 min), and then can be used.
- 4. If the prepared gel cannot be used on the same day, it can be stored at 4°C for 1-2 days.
- 5. Recommended electrophoresis conditions:

a. Use SWE Fast High-Resolution Electrophoresis Buffer (G2081) for electrophoresis: 200-250 V, 25-35 min.

b. Use Tris-Glycine Electrophoresis Buffer (G2018) for electrophoresis: upper gel 90 V, about 30 min (marker enters separation gel); lower gel 150-180 V, about 60-90 min (can be adjusted according to actual situation).

Notes:

- 1. Too large a temperature difference in the process of making gel heat production may produce bubbles, it is recommended that A, B premixed solution is ready to return to room temperature, and then add modified coagulant for gelation, which can effectively avoid the formation of small bubbles in the gelation process.
- 2. The modified coagulant has better stability than ammonium persulfate (AP). After use, take out one and store it at 4°C for subsequent regular use. It can be stored for six months. If not used for a long time, please store it at -20°C to avoid repeated freezing and thawing.
- 3. The stacker B may produce flocculent precipitation after being left still for a long time. Please gently shake it before use to mix it evenly.
- 4. There is monomer acrylamide in the premixed solution, which is harmful to the human body. Please pay attention to protective measures during operation.
- 5. To ensure that the sample enters the separating gel at the same time, when directly casting the stacker, slowly and evenly add the prepared stacker.
- 6. After adding the modified coagulant, cast the gel as soon as possible and do not leave it for a long time.
- 7. Temperature has a significant effect on the solidification time of the gel. To ensure the smooth



progress of the experiment, the lower the temperature, the longer the solidification time, and the amount of improved coagulant should be appropriately increased. The higher the temperature, the faster the gel solidifies, and the amount of improved coagulant can be appropriately reduced.

- 8. If you need to further accelerate the gel speed, add an appropriate amount of TEMED before casting the gel and increase the amount of modified coagulant by 0.5 times as needed.
- 9. We also provide other colored (green, yellow, blue) stacker to distinguish different samples for gel electrophoresis.
- 10. For your safety and health, please wear laboratory clothes and disposable gloves during operation.



Servicebio® Fast-Cast Colorful (Red) Acrylamide Kit, 10%

Cat #: G2043-50T

Product Information

Product Name	Cat. No.	Spec.
Fast-Cast Colorful (Red) Acrylamide Kit, 10%	G2043-50T	50 T

Product Description/Introduction

This kit provides a simple and rapid preparation of 10% PAGE coloured (red) gels, enabling the simultaneous preparation of both lower (separated) and upper (also known as stacking) gels, allowing the user to prepare protein gels quickly by simply preparing the gel preparation equipment. At the same time, the kit contains a red dye in the stacker B, which makes it possible to visualise the spiking process and greatly improves the spiking efficiency. The red dye is stable in the upper gel and does not migrate to the lower gel with electrophoresis, thus not affecting the electrophoresis and staining effect. It is also easy to identify and excise the upper gel after electrophoresis is completed, without affecting subsequent experiments such as Western Blot. The gels prepared in this kit can also be used for non-denaturing PAGE gel electrophoresis. This kit prepares 50 gels of regular size, the number of gels prepared depends on the thickness of the gel and the size of the gel.

Storage and Shipping Conditions

Ship with wet ice; Modified coagulant stored at -20 °C, others stored at 2-8 °C away from light, valid

for 12 months.

Product Components

Component Number	Component	G2043
G2043-1	Stacker A	50 mL
G2043-2	Stacker B (Red)	50 mL
G2043-3	10% Resolver A	125 mL
G2043-4 10% Resolver B		125 mL
G5036-5ML Modified coagulant		1 mL×5
Manual		1 pc

Assay Protocol/Procedures

1. Choose appropriate Concentration of PAGE resolver (separation gel) according to molecular weight of target protein, refer to the table below:

PAGE Separating Gel Concentration	Best separation range (kDa) (Tris-Glycine Buffer, G2018)	Best separation range (kDa) (SWE Fast High-Resolution Electrophoresis Buffer, G2081)
6%	50-250 kDa	15-300
8%	30-130 kDa	10-250
10%	20-100 kDa	5-150
12%	10-60 kDa	3-100
15%	< 40 kDa	<60



2. According to the experimental requirements, mix solution A and B in equal proportion, add appropriate amount of modified coagulant, and prepare the resolving solution and stacking solution respectively. Different specifications and different thickness of the glass plate can be adjusted in equal proportions to the stacking solution and resolving solution preparation volume, to the commonly used specifications of 8.3 cm × 7.3 cm gel plate (single), for example, the recommended preparation system is as follows table:

Configuration	Component	0.75 mm Glass	1.0 mm Glass	1.5 mm Glass
Groups	Component	Plates	Plates	Plates
	10% Resolver A	2 mL	2.5 mL	4 mL
Resolver	10% Resolver B	2 mL	2.5 mL	4 mL
	Modified coagulant	24 μL	30 µL	48 μL
	Stacker A	1 mL	1 mL	1.5 mL
Stacker	Stacker B (Red)	1 mL	1 mL	1.5 mL
	Modified coagulant	12 μL	12 μL	18 µL

After assembling the gel tool, first add the prepared resolver, then use distilled water or ethanol and other solutions to seal the surface of the resolver, wait until the resolver to solidify sufficiently (about 10-15 min), discard the water or ethanol, and use the filter paper to suck up the residual water or ethanol, and then add the prepared stacker, insert the comb, and wait until it is solidified (about 10-15 min), and then can be used; or in the stacker can be added to join the prepared resolver immediately and slowly, uniformly added to the upper layer of the gel solution prepared, and insert the comb, and wait until it is solidified (about 10-15 min), and then can be used.

- 3. If the prepared gel cannot be used on the same day, it can be stored at 4°C for 1-2 days.
- 4. Recommended electrophoresis conditions:

a. Use SWE Fast High-Resolution Electrophoresis Buffer (G2081) for electrophoresis: 200-250 V, 25-35 min.

b. Use Tris-Glycine Electrophoresis Buffer (G2018) for electrophoresis: upper gel 90 V, about 30 min (marker enters separation gel); lower gel 150-180 V, about 60-90 min (can be adjusted according to actual situation).

Notes:

- 1. Too large a temperature difference in the process of making gel heat production may produce bubbles, it is recommended that A, B premixed solution is ready to return to room temperature, and then add modified coagulant for gelation, which can effectively avoid the formation of small bubbles in the gelation process.
- 2. The modified coagulant has better stability than ammonium persulfate (AP). After use, take out one and store it at 4°C for subsequent regular use. It can be stored for six months. If not used for a long time, please store it at -20°C to avoid repeated freezing and thawing.
- 3. The stacker B may produce flocculent precipitation after being left still for a long time. Please gently shake it before use to mix it evenly.
- 4. There is monomer acrylamide in the premixed solution, which is harmful to the human body. Please pay attention to protective measures during operation.
- 5. To ensure that the sample enters the separating gel at the same time, when directly casting the stacker, slowly and evenly add the prepared stacker.
- 6. After adding the modified coagulant, cast the gel as soon as possible and do not leave it for a long



time.

- 7. Temperature has a significant effect on the solidification time of the gel. To ensure the smooth progress of the experiment, the lower the temperature, the longer the solidification time, and the amount of improved coagulant should be appropriately increased. The higher the temperature, the faster the gel solidifies, and the amount of improved coagulant can be appropriately reduced.
- 8. If you need to further accelerate the gel speed, add an appropriate amount of TEMED before casting the gel and increase the amount of modified coagulant by 0.5 times as needed.
- 9. We also provide other colored (green, yellow, blue) stacker to distinguish different samples for gel electrophoresis.
- 10. For your safety and health, please wear laboratory clothes and disposable gloves during operation.



*0Servicebio® Fast-Cast Colorful (Red) Acrylamide Kit, 12%

Cat #: G2044-50T

Product Information

Product Name	Cat. No.	Spec.
Fast-Cast Colorful (Red) Acrylamide Kit, 12%	G2044-50T	50 T (1.0 mm Glass Plates)

Product Description/Introduction

This kit provides a simple and rapid preparation of 12% PAGE coloured (red) gels, enabling the simultaneous preparation of both lower (separated) and upper (also known as stacking) gels, allowing the user to prepare protein gels quickly by simply preparing the gel preparation equipment. At the same time, the kit contains a red dye in the stacker B, which makes it possible to visualise the spiking process and greatly improves the spiking efficiency. The red dye is stable in the upper gel and does not migrate to the lower gel with electrophoresis, thus not affecting the electrophoresis and staining effect. It is also easy to identify and excise the upper gel after electrophoresis is completed, without affecting subsequent experiments such as Western Blot. The gels prepared in this kit can also be used for non-denaturing PAGE gel electrophoresis. This kit prepares 50 gels of regular size, the number of gels prepared depends on the thickness of the gel and the size of the gel.

Storage and Shipping Conditions

Ship with wet ice; Modified coagulant stored at -20°C, others stored at 2-8°C away from light, valid for 12 months.

Component Number	Component	G2044
G2044-1	Stacker A	50 mL
G2044-2	Stacker B (Red)	50 mL
G2044-3	12% Resolver A	125 mL
G2044-4 12% Resolver B		125 mL
G2044-5ML Modified coagulant		1 mL×5
	Manual	1 pc

Product Components

Assay Protocol/Procedures

1. Choose appropriate Concentration of PAGE resolver (separation gel) according to molecular weight of target protein, refer to the table below:

PAGE Separating Gel Concentration	Best separation range (kDa) (Tris-Glycine Buffer, G2018)	Best separation range (kDa) (SWE Fast High-Resolution Electrophoresis Buffer, G2081)
6%	50-300	15-300
8%	30-130	10-250
10%	20-100	5-150
12%	10-60	3-100
15%	<40	<60

2. According to the experimental requirements, mix solution A and B in equal proportion, add



appropriate amount of modified coagulant, and prepare the resolving solution and stacking solution respectively. Different specifications and different thickness of the glass plate can be adjusted in equal proportions to the stacking solution and resolving solution preparation volume, to the commonly used specifications of 8.3 cm \times 7.3 cm gel plate (single), for example, the recommended preparation system is as follows table:

Configuration Groups	Component	0.75 mm Glass Plates	1.0 mm Glass Plates	1.5 mm Glass Plates
Resolver	12% Resolver A	2 mL	2.5 mL	4 mL
	12% Resolver B	2 mL	2.5 mL	4 mL
	Modified coagulant	24 µL	30 µL	48 µL
	Stacker A	1 mL	1 mL	1.5 mL
Stacker	Stacker B (Red)	1 mL	1 mL	1.5 mL
	Modified coagulant	12 µL	12 µL	18 µL

3. 3. After assembling the gel tool, first add the prepared resolver, then use distilled water or ethanol and other solutions to seal the surface of the resolver, wait until the resolver to solidify sufficiently (about 10-15 min), discard the water or ethanol, and use the filter paper to suck up the residual water or ethanol, and then add the prepared stacker, insert the comb, and wait until it is solidified (about 10-15 min), and then can be used; or in the stacker can be added to join the prepared resolver immediately and slowly, uniformly added to the upper layer of the gel solution prepared, and insert the comb, and wait until it is solidified (about 10-15 min), and wait until it is solidified (about 10-15 min), and then can be used;

- 4. If the prepared gel cannot be used on the same day, it can be stored at 4°C for 1-2 days.
- 5. Recommended electrophoresis conditions:

a. Use SWE Fast High-Resolution Electrophoresis Buffer (G2081) for electrophoresis: 200-250 V, 25-35 min.

b. Use Tris-Glycine Electrophoresis Buffer (G2018) for electrophoresis: upper gel 90 V, about 30 min (marker enters separating gel); Lower gel 150-180 V, about 60-90 min (can be adjusted according to actual situation).

Note

- 1. Too large a temperature difference in the process of making gel heat production may produce bubbles, it is recommended that A, B premixed solution is ready to return to room temperature, and then add modified coagulant for gelation, which can effectively avoid the formation of small bubbles in the gelation process.
- 2. The modified coagulant has better stability than ammonium persulfate (AP). After use, take out one and store it at 4°C for subsequent regular use. It can be stored for six months. If not used for a long time, please store it at -20°C to avoid repeated freezing and thawing.
- 3. The stacker B may produce flocculent precipitation after being left still for a long time. Please gently shake it before use to mix it evenly.
- 4. There is monomer acrylamide in the premixed solution, which is harmful to the human body. Please pay attention to protective measures during operation.
- 5. To ensure that the sample enters the separating gel at the same time, when directly casting the stacker, slowly and evenly add the prepared stacker.
- 6. After adding the modified coagulant, cast the gel as soon as possible and do not leave it for a long



time.

- 7. Temperature has a significant effect on the solidification time of the gel. To ensure the smooth progress of the experiment, the lower the temperature, the longer the solidification time, and the amount of improved coagulant should be appropriately increased. The higher the temperature, the faster the gel solidifies, and the amount of improved coagulant can be appropriately reduced.
- 8. If you need to further accelerate the gel speed, add an appropriate amount of TEMED before casting the gel and increase the amount of modified coagulant by 0.5 times as needed.
- 9. We also provide other colored (green, yellow, blue) stacker to distinguish different samples for gel electrophoresis.
- 10. For your safety and health, please wear laboratory clothes and disposable gloves during operation.



Servicebio® Fast-Cast Colorful (Red) Acrylamide Kit, 15%

Cat #: G2045-50T

Product Information

Product Name	Cat. No.	Spec.
Fast-Cast Colorful (Red) Acrylamide Kit, 15%	G2045-50T	50 T

Product Description/Introduction

This kit provides a simple and rapid preparation of 15% PAGE coloured (red) gels, enabling the simultaneous preparation of both lower (separated) and upper (also known as stacking) gels, allowing the user to prepare protein gels quickly by simply preparing the gel preparation equipment. At the same time, the kit contains a red dye in the stacker B, which makes it possible to visualise the spiking process and greatly improves the spiking efficiency. The red dye is stable in the upper gel and does not migrate to the lower gel with electrophoresis, thus not affecting the electrophoresis and staining effect. It is also easy to identify and excise the upper gel after electrophoresis is completed, without affecting subsequent experiments such as Western Blot. The gels prepared in this kit can also be used for non-denaturing PAGE gel electrophoresis. This kit prepares 50 gels of regular size, the number of gels prepared depends on the thickness of the gel and the size of the gel.

Storage and Shipping Conditions

Ship with wet ice; Modified coagulant stored at -20°C, others stored at 2-8°C away from light, valid for 12 months.

Component Number	Component	G2045
G2045-1	Stacker A	50 mL
G2045-2	Stacker B (Red)	50 mL
G2045-3	15% Resolver A	125 mL
G2045-4	15% Resolver B	125 mL
G5036-5ML Modified coagulant		1 mL*5
	Manual	1 pc

Product Components

Assay Protocol/Procedures

1. Choose appropriate Concentration of PAGE resolver (separation gel) according to molecular weight of target protein, refer to the table below:

PAGE Separating Gel Concentration	Best separation range (kDa) (Tris-Glycine Buffer, G2018)	Best separation range (kDa) (SWE Fast High-Resolution Electrophoresis Buffer, G2081)
6%	50-300	15-300
8%	30-130	10-250
10%	20-100	5-150
12%	10-60	3-100
15%	<40	<60

2. According to the experimental requirements, mix solution A and B in equal proportion, add appropriate amount of modified coagulant, and prepare the resolving solution and stacking solution respectively.



Different specifications and different thickness of the glass plate can be adjusted in equal proportions to the stacking solution and resolving solution preparation volume, to the commonly used specifications of 8.3 cm \times 7.3 cm gel plate (single), for example, the recommended preparation system is as follows table:

Configuration Groups	Component	0.75 mm Glass Plates	1.0 mm Glass Plates	1.5 mm Glass Plates
	15% Resolver A	2 mL	2.5 mL	4 mL
Resolver	15% Resolver B	2 mL	2.5 mL	4 mL
	Modified coagulant	24 µL	30 µL	48 µL
	Stacker A	1 mL	1 mL	1.5 mL
Stacker	Stacker B (Red)	1 mL	1 mL	1.5 mL
	Modified coagulant	12 µL	12 µL	18 µL

- 3. After assembling the gel tool, first add the prepared resolver, then use distilled water or ethanol and other solutions to seal the surface of the resolver, wait until the resolver to solidify sufficiently (about 10-15 min), discard the water or ethanol, and use the filter paper to suck up the residual water or ethanol, and then add the prepared stacker, insert the comb, and wait until it is solidified (about 10-15 min), and then can be used; or in the stacker can be added to join the prepared resolver immediately and slowly, uniformly added to the upper layer of the gel solution prepared, and insert the comb, and wait until it is solidified (about 10-15 min), and then can be used.
- 4. If the prepared gel cannot be used on the same day, it can be stored at 4°C for 1-2 days.
- 5. Recommended electrophoresis conditions:

a. Use SWE Fast High-Resolution Electrophoresis Buffer (G2081) for electrophoresis: 200-250 V, 25-35 min.

b. Use Tris-Glycine Electrophoresis Buffer (G2018) for electrophoresis: upper gel 90 V, about 30 min (marker enters separation gel); lower gel 150-180 V, about 60-90 min (can be adjusted according to actual situation).

Notes:

- 1. Too large a temperature difference in the process of making gel heat production may produce bubbles, it is recommended that A, B premixed solution is ready to return to room temperature, and then add modified coagulant for gelation, which can effectively avoid the formation of small bubbles in the gelation process.
- 2. The modified coagulant has better stability than ammonium persulfate (AP). After use, take out one and store it at 4°C for subsequent regular use. It can be stored for six months. If not used for a long time, please store it at -20°C to avoid repeated freezing and thawing.
- 3. The stacker B may produce flocculent precipitation after being left still for a long time. Please gently shake it before use to mix it evenly.
- 4. There is monomer acrylamide in the premixed solution, which is harmful to the human body. Please pay attention to protective measures during operation.
- 5. To ensure that the sample enters the separating gel at the same time, when directly casting the stacker,

slowly and evenly add the prepared stacker.

6. After adding the modified coagulant, cast the gel as soon as possible and do not leave it for a long time.

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- 7. Temperature has a significant effect on the solidification time of the gel. To ensure the smooth progress of the experiment, the lower the temperature, the longer the solidification time, and the amount of improved coagulant should be appropriately increased. The higher the temperature, the faster the gel solidifies, and the amount of improved coagulant can be appropriately reduced.
- 8. If you need to further accelerate the gel speed, add an appropriate amount of TEMED before casting the gel and increase the amount of modified coagulant by 0.5 times as needed.
- 9. We also provide other colored (green, yellow, blue) stacker to distinguish different samples for gel electrophoresis.
- 10. For your safety and health, please wear laboratory clothes and disposable gloves during operation.



Servicebio® Fast-Cast Colorful (Red) Acrylamide Kit, 15%

Cat #: G2045-50T

Product Information

Product Name	Cat. No.	Spec.
Fast-Cast Colorful (Red) Acrylamide Kit, 15%	G2045-50T	50 T

Product Description/Introduction

This kit provides a simple and rapid preparation of 15% PAGE coloured (red) gels, enabling the simultaneous preparation of both lower (separated) and upper (also known as stacking) gels, allowing the user to prepare protein gels quickly by simply preparing the gel preparation equipment. At the same time, the kit contains a red dye in the stacker B, which makes it possible to visualise the spiking process and greatly improves the spiking efficiency. The red dye is stable in the upper gel and does not migrate to the lower gel with electrophoresis, thus not affecting the electrophoresis and staining effect. It is also easy to identify and excise the upper gel after electrophoresis is completed, without affecting subsequent experiments such as Western Blot. The gels prepared in this kit can also be used for non-denaturing PAGE gel electrophoresis. This kit prepares 50 gels of regular size, the number of gels prepared depends on the thickness of the gel and the size of the gel.

Storage and Shipping Conditions

Ship with wet ice; Modified coagulant stored at -20°C, others stored at 2-8°C away from light, valid for 12 months.

Component Number	Component	G2045
G2045-1	Stacker A	50 mL
G2045-2	Stacker B (Red)	50 mL
G2045-3	15% Resolver A	125 mL
G2045-4	15% Resolver B	125 mL
G5036-5ML Modified coagulant		1 mL*5
	Manual	1 pc

Product Components

Assay Protocol/Procedures

1. Choose appropriate Concentration of PAGE resolver (separation gel) according to molecular weight of target protein, refer to the table below:

PAGE Separating Gel Concentration	Best separation range (kDa) (Tris-Glycine Buffer, G2018)	Best separation range (kDa) (SWE Fast High-Resolution Electrophoresis Buffer, G2081)
6%	50-300	15-300
8%	30-130	10-250
10%	20-100	5-150
12%	10-60	3-100
15%	<40	<60

2. According to the experimental requirements, mix solution A and B in equal proportion, add appropriate amount of modified coagulant, and prepare the resolving solution and stacking solution respectively.



Different specifications and different thickness of the glass plate can be adjusted in equal proportions to the stacking solution and resolving solution preparation volume, to the commonly used specifications of 8.3 cm \times 7.3 cm gel plate (single), for example, the recommended preparation system is as follows table:

Configuration Groups	Component	0.75 mm Glass Plates	1.0 mm Glass Plates	1.5 mm Glass Plates
	15% Resolver A	2 mL	2.5 mL	4 mL
Resolver	15% Resolver B	2 mL	2.5 mL	4 mL
	Modified coagulant	24 µL	30 µL	48 µL
	Stacker A	1 mL	1 mL	1.5 mL
Stacker	Stacker B (Red)	1 mL	1 mL	1.5 mL
	Modified coagulant	12 µL	12 µL	18 µL

- 3. After assembling the gel tool, first add the prepared resolver, then use distilled water or ethanol and other solutions to seal the surface of the resolver, wait until the resolver to solidify sufficiently (about 10-15 min), discard the water or ethanol, and use the filter paper to suck up the residual water or ethanol, and then add the prepared stacker, insert the comb, and wait until it is solidified (about 10-15 min), and then can be used; or in the stacker can be added to join the prepared resolver immediately and slowly, uniformly added to the upper layer of the gel solution prepared, and insert the comb, and wait until it is solidified (about 10-15 min), and then can be used.
- 4. If the prepared gel cannot be used on the same day, it can be stored at 4°C for 1-2 days.
- 5. Recommended electrophoresis conditions:

a. Use SWE Fast High-Resolution Electrophoresis Buffer (G2081) for electrophoresis: 200-250 V, 25-35 min.

b. Use Tris-Glycine Electrophoresis Buffer (G2018) for electrophoresis: upper gel 90 V, about 30 min (marker enters separation gel); lower gel 150-180 V, about 60-90 min (can be adjusted according to actual situation).

Notes:

- 1. Too large a temperature difference in the process of making gel heat production may produce bubbles, it is recommended that A, B premixed solution is ready to return to room temperature, and then add modified coagulant for gelation, which can effectively avoid the formation of small bubbles in the gelation process.
- 2. The modified coagulant has better stability than ammonium persulfate (AP). After use, take out one and store it at 4°C for subsequent regular use. It can be stored for six months. If not used for a long time, please store it at -20°C to avoid repeated freezing and thawing.
- 3. The stacker B may produce flocculent precipitation after being left still for a long time. Please gently shake it before use to mix it evenly.
- 4. There is monomer acrylamide in the premixed solution, which is harmful to the human body. Please pay attention to protective measures during operation.
- 5. To ensure that the sample enters the separating gel at the same time, when directly casting the stacker,

slowly and evenly add the prepared stacker.

6. After adding the modified coagulant, cast the gel as soon as possible and do not leave it for a long time.

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- 7. Temperature has a significant effect on the solidification time of the gel. To ensure the smooth progress of the experiment, the lower the temperature, the longer the solidification time, and the amount of improved coagulant should be appropriately increased. The higher the temperature, the faster the gel solidifies, and the amount of improved coagulant can be appropriately reduced.
- 8. If you need to further accelerate the gel speed, add an appropriate amount of TEMED before casting the gel and increase the amount of modified coagulant by 0.5 times as needed.
- 9. We also provide other colored (green, yellow, blue) stacker to distinguish different samples for gel electrophoresis.
- 10. For your safety and health, please wear laboratory clothes and disposable gloves during operation.



Servicebio® Fast-Cast Colorful (Green) Acrylamide Kit, 6%

Cat #: G2060-50T

Product Information

Product Name	Cat. No.	Spec.
Fast-Cast Colorful (Green) Acrylamide Kit, 6%	G2060-50T	50 T (1.0 mm Glass Plates)

Product Description/Introduction

This kit provides a simple and rapid preparation of 6% PAGE coloured (green) gels, enabling the simultaneous preparation of both resolving and stacking gels, allowing the user to prepare protein gels quickly by simply preparing the gel preparation equipment. At the same time, the kit contains a green dye in the stacker B, which makes it possible to visualise the spiking process and greatly improves the spiking efficiency. The green dye is stable in the stacker and does not migrate to the resolver with electrophoresis, thus not affecting the electrophoresis and staining effect. It is also easy to identify and excise the stacker after electrophoresis is completed, without affecting subsequent experiments such as Western Blot. The gels prepared in this kit can also be used for non-denaturing PAGE gel electrophoresis.

This kit prepares 50 gels of regular size, the number of gels prepared depends on the thickness of the gel and the size of the gel.

Storage and Shipping Conditions

Ship with wet ice; Modified coagulant stored at -20°C, others stored at 2-8°C away from light, valid for 12 months.

Component Number	Component	G2060-50T
G2060-1	Stacker A	50 mL
G2060-2	Stacker B (Green)	50 mL
G2060-3	6% Resolver A	125 mL
G2060-4	6% Resolver B	125 mL
G5036-5ML Modified coagulant		1 mL*5
	Manual	1 pc

Product Components

Assay Protocol/Procedures

1. Choose appropriate Concentration of PAGE resolver (separation gel) according to molecular weight of target protein, refer to the table below:

PAGE Separating Gel	Best separation range (kDa)	Best separation range (kDa)	
Concentration	(Tris-Glycine Buffer, G2018)	(SWE Fast High-Resolution	
		Electrophoresis Buffer, G2081)	
6%	50-250 kDa	15-300	
8%	30-130 kDa	10-250	
10%	20-100 kDa	5-150	
12%	10-60 kDa	3-100	
15%	< 40 kDa	<60	

2. According to the experimental requirements, mix solution A and B in equal proportion, add appropriate amount of modified coagulant, and prepare the resolving solution and stacking solution



respectively. Different specifications and different thickness of the glass plate can be adjusted in equal proportions to the stacking solution and resolving solution preparation volume, to the commonly used specifications of 8.3 cm × 7.3 cm gel plate (single), for example, the recommended preparation system is as follows table:

Configuration Croups	Component	0.75 mm Glass	1.0 mm Glass	1.5 mm Glass
configuration Groups	Component	Plates	Plates	Plates
	6% Resolver A	2 mL	2.5 mL	4 mL
Resolver	6% Resolver B	2 mL	2.5 mL	4 mL
	Modified coagulant	24 µL	30 µL	48 μL
	Stacker A	1 mL	1 mL	1.5 mL
Stacker	Stacker B (Green)	1 mL	1 mL	1.5 mL
	Modified coagulant	12 μL	12 µL	18 µL

3. After assembling the gel tool, first add the prepared resolver, then use distilled water or ethanol and other solutions to seal the surface of the resolver, wait until the resolver to solidify sufficiently (about 10-15 min), discard the water or ethanol, and use the filter paper to suck up the residual water or ethanol, and then add the prepared stacker, insert the comb, and wait until it is solidified (about 10-15 min), and then can be used; or in the stacker can be added to join the prepared resolver immediately and slowly, uniformly added to the upper layer of the gel solution prepared, and insert the comb, and wait until it is solidified (about 10-15 min), and then can be used.

- 4. If the prepared gel cannot be used on the same day, it can be stored at 4°C for 1-2 days.
- 5. Recommended electrophoresis conditions:

a. Use SWE Fast High-Resolution Electrophoresis Buffer (G2081) for electrophoresis: 200-250 V, 25-35 min.

b. Use Tris-Glycine Electrophoresis Buffer (G2018) for electrophoresis: stacker 90 V, about 30 min (marker enters separation gel); resolver 150-180 V, about 60-90 min (can be adjusted according to actual situation).

Notes:

- 1. Too large a temperature difference in the process of making gel heat production may produce bubbles, it is recommended that A, B premixed solution is ready to return to room temperature, and then add modified coagulant for gelation, which can effectively avoid the formation of small bubbles in the gelation process.
- 2. The modified coagulant has better stability than ammonium persulfate (AP). After use, take out one and store it at 4°C for subsequent regular use. It can be stored for six months. If not used for a long time, please store it at -20°C to avoid repeated freezing and thawing.
- 3. The stacker B may produce flocculent precipitation after being left still for a long time. Please gently shake it before use to mix it evenly.
- 4. There is monomer acrylamide in the premixed solution, which is harmful to the human body. Please pay attention to protective measures during operation.
- 5. To ensure that the sample enters the separating gel at the same time, when directly casting the stacker, slowly and evenly add the prepared stacker .
- 6. After adding the modified coagulant, cast the gel as soon as possible and do not leave it for a long time.
- 7. Temperature has a significant effect on the solidification time of the gel. To ensure the smooth progress of the experiment, the lower the temperature, the longer the solidification time, and the



amount of improved coagulant should be appropriately increased. The higher the temperature, the faster the gel solidifies, and the amount of improved coagulant can be appropriately reduced.

- 8. If you need to further accelerate the gel speed, add an appropriate amount of TEMED before casting the gel and increase the amount of modified coagulant by 0.5 times as needed.
- 9. We also provide other colored (green, yellow, blue) stacker to distinguish different samples for gel electrophoresis.
- 10. For your safety and health, please wear laboratory clothes and disposable gloves during operation.



Servicebio® Fast-Cast Colorful (Green) Acrylamide Kit, 8%

Cat #: G2061-50T

Product Information

Product Name	Cat. No.	Spec.
Fast-Cast Colorful (Green) Acrylamide Kit, 8%	G2061-50T	50 T

Product Description/Introduction

This kit provides a simple and rapid preparation of 8% PAGE coloured (green) gels, enabling the simultaneous preparation of both resolving and stacking gels, allowing the user to prepare protein gels quickly by simply preparing the gel preparation equipment. At the same time, the kit contains a green dye in the stacker B, which makes it possible to visualise the spiking process and greatly improves the spiking efficiency. The green dye is stable in the stacker and does not migrate to the resolver with electrophoresis, thus not affecting the electrophoresis and staining effect. It is also easy to identify and excise the stacker after electrophoresis is completed, without affecting subsequent experiments such as Western Blot. The gels prepared in this kit can also be used for non-denaturing PAGE gel electrophoresis.

This kit prepares 50 gels of regular size, the number of gels prepared depends on the thickness of the gel and the size of the gel.

Storage and Shipping Conditions

Ship with wet ice; modified coagulant need to be stored at -20 $^{\circ}$ C, other components need to be stored at 2-8 $^{\circ}$ C to avoid light, valid for 12 months.

Component Number	Component	G2061-50T
G2061-1	Stacker A	50 mL
G2061-2	Stacker B (Green)	50 mL
G2061-3	8% Resolver A	125 mL
G2061-4 8% Resolver B		125 mL
G5036-5ML Modified Coagulant		1 mL×5
Manual		1 pc

Product Components

Assay Protocol/Procedures

1. According to the molecular weight of the target protein and the selected electrophoresis buffer, select the appropriate concentration of PAGE resolver (separating gel), refer to the table below:

PAGE Separating Gel Concentration	Optimal Separation Range (kDa) (Tris-Glycine Buffer, G2018)	Optimal Separation Range (kDa) (SWE Rapid High Resolution Running Buffer, G2081)
6%	50-300	15-300
8%	30-130	10-250
10%	20-100	5-150
12%	10-60	3-100
15%	< 40	<60



2. According to the experimental requirements, mix solution A and B in equal proportion, add appropriate amount of modified coagulant, and prepare the resolving solution and stacking solution respectively. Different specifications and different thickness of the glass plate can be adjusted in equal proportions to the stacking solution and resolving solution preparation volume, to the commonly used specifications of 8.3 cm × 7.3 cm gel plate (single), for example, the recommended preparation system is as follows table:

Configuration	Commente	0.75 mm Glass	1.0 mm Glass	1.5 mm Glass
Groups	Components	Plates	Plates	Plates
	8% Resolver A	2 mL	2.5 mL	4 mL
Resolver	8% Resolver B	2 mL	2.5 mL	4 mL
	Modified Coagulant	24 μL	30 µL	48 µL
	Stacker A	1 mL	1 mL	1.5 mL
Stacker	Stacker B (Green)	1 mL	1 mL	1.5 mL
	Modified Coagulant	12 µL	12 µL	18 µL

- 3. After assembling the gel tool, first add the prepared resolver, then use distilled water or ethanol and other solutions to seal the surface of the resolver, wait until the resolver to solidify sufficiently (about 10-15 min), discard the water or ethanol, and use the filter paper to suck up the residual water or ethanol, and then add the prepared stacker, insert the comb, and wait until it is solidified (about 10-15 min), and then can be used; or in the stacker can be added to join the prepared resolver immediately and slowly, uniformly added to the upper layer of the gel solution prepared, and insert the comb, and wait until it is solidified (about 10-15 min), and then can be used.
- 4. If the prepared gel cannot be used on the same day, it can be stored at 4°C for 1-2 days;
- 5. Recommended electrophoresis conditions:

a. Use SWE Fast High-Resolution Electrophoresis Buffer (G2081) for electrophoresis: 200-250 V, 25-35 min.

b. Use Tris-Glycine Electrophoresis Buffer (G2018) for electrophoresis: stacker 90 V, about 30 min (marker enters separation gel); resolver 150-180 V, about 60-90 min (can be adjusted according to actual situation).

Note

- 1. Too large a temperature difference in the process of making gel heat production may produce bubbles, it is recommended that A, B premixed solution is ready to return to room temperature, and then add modified coagulant for gelation, which can effectively avoid the formation of small bubbles in the gelation process.
- 2. The modified coagulant has better stability than ammonium persulfate (AP). After use, take out one and store it at 4°C for subsequent regular use. It can be stored for six months. If not used for a long time, please store it at -20°C to avoid repeated freezing and thawing.
- 3. The stacker B may produce flocculent precipitation after being left still for a long time. Please gently shake it before use to mix it evenly.
- 4. There is monomer acrylamide in the premixed solution, which is harmful to the human body. Please pay attention to protective measures during operation.
- 5. To ensure that the sample enters the separating gel at the same time, when directly casting the stacker, slowly and evenly add the prepared stacker.
- 6. After adding the modified coagulant, cast the gel as soon as possible and do not leave it for a long time.



- 7. Temperature has a significant effect on the solidification time of the gel. To ensure the smooth progress of the experiment, the lower the temperature, the longer the solidification time, and the amount of improved coagulant should be appropriately increased. The higher the temperature, the faster the gel solidifies, and the amount of improved coagulant can be appropriately reduced.
- 8. If you need to further accelerate the gel speed, add an appropriate amount of TEMED before casting the gel and increase the amount of modified coagulant by 0.5 times as needed.
- 9. We also provide other colored (green, yellow, blue) stacker to distinguish different samples for gel electrophoresis.
- 10. For your safety and health, please wear laboratory clothes and disposable gloves during operation.



Servicebio® Fast-Cast Colorful (Green) Acrylamide Kit, 10%

Cat #: G2062-50T

Product Information

Product Name	Cat. No.	Spec.
Fast-Cast Colorful (Green) Acrylamide Kit, 10%	G2062-50T	50 T

Product Description/Introduction

This kit provides a simple and rapid preparation of 10% PAGE coloured (green) gels, enabling the simultaneous preparation of both resolving and stacking gels, allowing the user to prepare protein gels quickly by simply preparing the gel preparation equipment. At the same time, the kit contains a green dye in the stacker B, which makes it possible to visualise the spiking process and greatly improves the spiking efficiency. The green dye is stable in the stacker and does not migrate to the resolver with electrophoresis, thus not affecting the electrophoresis and staining effect. It is also easy to identify and excise the stacker after electrophoresis is completed, without affecting subsequent experiments such as Western Blot. The gels prepared in this kit can also be used for non-denaturing PAGE gel electrophoresis.

This kit prepares 50 gels of regular size, the number of gels prepared depends on the thickness of the gel and the size of the gel.

Storage and Shipping Conditions

Ship with wet ice; modified coagulant need to be stored at -20 $^{\circ}$ C, other components need to be stored at 2-8 $^{\circ}$ C to avoid light, valid for 12 months.

Component Number	Component	G2062-50T
G2062-1	Stacker A	50 mL
G2062-2	Stacker B (Green)	50 mL
G2062-3	10% Resolver A	125 mL
G2062-4 10% Resolver B		125 mL
G5036-5ML Modified Coagulant		1 mL×5
Manual		1 pc

Product Components

Assay Protocol/Procedures

1. Choose appropriate Concentration of PAGE resolver (separation gel) according to molecular weight of target protein, refer to the table below:

PAGE Separating Gel Concentration	Optimal Separation Range (kDa) (Tris-Glycine Buffer, G2018)	Optimal Separation Range (kDa) (SWE Rapid High Resolution Running Buffer, G2081)
6%	50-300	15-300
8%	30-130	10-250
10%	20-100	5-150
12%	10-60	3-100
15%	<40	<60



2. According to the experimental requirements, mix solution A and B in equal proportion, add appropriate amount of modified coagulant, and prepare the resolving solution and stacking solution respectively. Different specifications and different thickness of the glass plate can be adjusted in equal proportions to the stacking solution and resolving solution preparation volume, to the commonly used specifications of 8.3 cm × 7.3 cm gel plate (single), for example, the recommended preparation system is as follows table:

Configuration	Componente	0.75 mm Glass	1.0 mm Glass	1.5 mm Glass
Groups	Components	Plates	Plates	Plates
	10% Resolver A	2 mL	2.5 mL	4 mL
Resolver	10% Resolver B	2 mL	2.5 mL	4 mL
	Modified Coagulant	24 μL	30 µL	48 µL
	Stacker A	1 mL	1 mL	1.5 mL
Stacker	Stacker B (Green)	1 mL	1 mL	1.5 mL
	Modified Coagulant	12 µL	12 µL	18 µL

- 3. After assembling the gel tool, first add the prepared resolver, then use distilled water or ethanol and other solutions to seal the surface of the resolver, wait until the resolver to solidify sufficiently (about 10-15 min), discard the water or ethanol, and use the filter paper to suck up the residual water or ethanol, and then add the prepared stacker, insert the comb, and wait until it is solidified (about 10-15 min), and then can be used; or in the stacker can be added to join the prepared resolver immediately and slowly, uniformly added to the upper layer of the gel solution prepared, and insert the comb, and wait until it is solidified (about 10-15 min), and then can be used.
- 4. If the prepared gel cannot be used on the same day, it can be stored at 4°C for 1-2 days.
- 5. Recommended electrophoresis conditions:

a. Use SWE Fast High-Resolution Electrophoresis Buffer (G2081) for electrophoresis: 200-250 V, 25-35 min.

b. Use Tris-Glycine Electrophoresis Buffer (G2018) for electrophoresis: stacker 90 V, about 30 min (marker enters separation gel); resolver 150-180 V, about 60-90 min (can be adjusted according to actual situation).

Note

- 1. Too large a temperature difference in the process of making gel heat production may produce bubbles, it is recommended that A, B premixed solution is ready to return to room temperature, and then add modified coagulant for gelation, which can effectively avoid the formation of small bubbles in the gelation process.
- 2. The modified coagulant has better stability than ammonium persulfate (AP). After use, take out one and store it at 4°C for subsequent regular use. It can be stored for six months. If not used for a long time, please store it at -20°C to avoid repeated freezing and thawing.
- 3. The stacker B may produce flocculent precipitation after being left still for a long time. Please gently shake it before use to mix it evenly.
- 4. There is monomer acrylamide in the premixed solution, which is harmful to the human body. Please pay attention to protective measures during operation.
- 5. To ensure that the sample enters the separating gel at the same time, when directly casting the stacker, slowly and evenly add the prepared stacker.
- 6. After adding the modified coagulant, cast the gel as soon as possible and do not leave it for a long time.



- 7. Temperature has a significant effect on the solidification time of the gel. To ensure the smooth progress of the experiment, the lower the temperature, the longer the solidification time, and the amount of improved coagulant should be appropriately increased. The higher the temperature, the faster the gel solidifies, and the amount of improved coagulant can be appropriately reduced.
- 8. If you need to further accelerate the gel speed, add an appropriate amount of TEMED before casting the gel and increase the amount of modified coagulant by 0.5 times as needed.
- 9. We also provide other colored (green, yellow, blue) stacker to distinguish different samples for gel electrophoresis.
- 10. For your safety and health, please wear laboratory clothes and disposable gloves during operation.



Servicebio® Fast-Cast Colorful (Green) Acrylamide Kit, 12%

Cat #: G2063-50T

Product Information

Product Name	Cat. No.	Spec.
Fast-Cast Colorful (Green) Acrylamide Kit, 12%	G2063-50T	50 T

Product Description/Introduction

This kit provides a simple and rapid preparation of 12% PAGE coloured (green) gels, enabling the simultaneous preparation of both resolving and stacking gels, allowing the user to prepare protein gels quickly by simply preparing the gel preparation equipment. At the same time, the kit contains a green dye in the stacker B, which makes it possible to visualise the spiking process and greatly improves the spiking efficiency. The green dye is stable in the stacker and does not migrate to the resolver with electrophoresis, thus not affecting the electrophoresis and staining effect. It is also easy to identify and excise the stacker after electrophoresis is completed, without affecting subsequent experiments such as Western Blot. The gels prepared in this kit can also be used for non-denaturing PAGE gel electrophoresis.

This kit prepares 50 gels of regular size, the number of gels prepared depends on the thickness of the gel and the size of the gel.

Storage and Shipping Conditions

Ship with wet ice; modified coagulant need to be stored at -20 $^{\circ}$ C, other components need to be stored at 2-8 $^{\circ}$ C to avoid light, valid for 12 months.

Component Number	Component	G2063-50T	
G2063-1	Stacker A	50 mL	
G2063-2	Stacker B (Green)	50 mL	
G2063-3	12% Resolver A	125 mL	
G2063-4	12% Resolver B	125 mL	
G5036-5ML	Modified Coagulant	1 mL×5	
Manual		1 pc	

Product Components

Assay Protocol/Procedures

1. Choose appropriate Concentration of acrylamide solution according to molecular weight of target protein, refer to the table below:

PAGE Separating Gel Concentration	Optimal Separation Range (kDa) (Tris-Glycine Buffer, G2018)	Optimal Separation Range (kDa) (SWE Rapid High Resolution Running Buffer, G2081)	
6%	50-300	15-300	
8%	30-130	10-250	
10%	20-100	5-150	
12%	10-60	3-100	
15%	<40	<60	



2. According to the experimental requirements, mix solution A and B in equal proportion, add appropriate amount of modified coagulant, and prepare the resolving solution and stacking solution respectively. Different specifications and different thickness of the glass plate can be adjusted in equal proportions to the stacking solution and resolving solution preparation volume, to the commonly used specifications of 8.3 cm × 7.3 cm gel plate (single), for example, the recommended preparation system is as follows table:

Configuration	Componente	0.75 mm Glass	1.0 mm Glass	1.5 mm Glass
Groups	Components	Plates	Plates	Plates
Resolver	12% Resolver A	2 mL	2.5 mL	4 mL
	12% Resolver B	2 mL	2.5 mL	4 mL
	Modified Coagulant	24 μL	30 µL	48 µL
Stacker	Stacker A	1 mL	1 mL	1.5 mL
	Stacker B (Green)	1 mL	1 mL	1.5 mL
	Modified Coagulant	12 µL	12 µL	18 µL

- 3. After assembling the gel tool, first add the prepared resolver, then use distilled water or ethanol and other solutions to seal the surface of the resolver, wait until the resolver to solidify sufficiently (about 10-15 min), discard the water or ethanol, and use the filter paper to suck up the residual water or ethanol, and then add the prepared stacker, insert the comb, and wait until it is solidified (about 10-15 min), and then can be used; or in the stacker can be added to join the prepared resolver immediately and slowly, uniformly added to the upper layer of the gel solution prepared, and insert the comb, and wait until it is solidified (about 10-15 min), and then can be used.
- 4. If the prepared gel cannot be used on the same day, it can be stored at 4°C for 1-2 days;
- 5. Recommended electrophoresis conditions:

a. Use SWE Fast High-Resolution Electrophoresis Buffer (G2081) for electrophoresis: 200-250 V, 25-35 min.

b. Use Tris-Glycine Electrophoresis Buffer (G2018) for electrophoresis: stacker 90 V, about 30 min (marker enters separation gel); resolver 150-180 V, about 60-90 min (can be adjusted according to actual situation).

Note

- 1. Too large a temperature difference in the process of making gel heat production may produce bubbles, it is recommended that A, B premixed solution is ready to return to room temperature, and then add modified coagulant for gelation, which can effectively avoid the formation of small bubbles in the gelation process.
- 2. The modified coagulant has better stability than ammonium persulfate (AP). After use, take out one and store it at 4°C for subsequent regular use. It can be stored for six months. If not used for a long time, please store it at -20°C to avoid repeated freezing and thawing.
- 3. The stacker B may produce flocculent precipitation after being left still for a long time. Please gently shake it before use to mix it evenly.
- 4. There is monomer acrylamide in the premixed solution, which is harmful to the human body. Please pay attention to protective measures during operation.
- 5. To ensure that the sample enters the separating gel at the same time, when directly casting the stacker, slowly and evenly add the prepared stacker.
- 6. After adding the modified coagulant, cast the gel as soon as possible and do not leave it for a long time.


- 7. Temperature has a significant effect on the solidification time of the gel. To ensure the smooth progress of the experiment, the lower the temperature, the longer the solidification time, and the amount of improved coagulant should be appropriately increased. The higher the temperature, the faster the gel solidifies, and the amount of improved coagulant can be appropriately reduced.
- 8. If you need to further accelerate the gel speed, add an appropriate amount of TEMED before casting the gel and increase the amount of modified coagulant by 0.5 times as needed.
- 9. We also provide other colored (green, yellow, blue) stacker to distinguish different samples for gel electrophoresis.
- 10. For your safety and health, please wear laboratory clothes and disposable gloves during operation.

Fast-Cast Colorful (Green) Acrylamide Kit, 15%



Online Co	onsultation			
Cat.No. :	G2064-50T			
Brand :	Servicebio			
Spec.:	50 T (6% (Red))	50 T (8%(Red))	50 T (10% (Red))	50 T (12% (Red))
	50 T (15% (Red))	50 T (6% (Green))	50 T (8% (Green))	
	50 T (10% (Green))	50 T (12% (Green)) 50 T (15% (Gree	en))

Product Introduction

Product Information

Product Name	Cat. No.	Spec.
Fast-Cast Colorful (Green) Acrylamide Kit, 15%	G2064-50T	50 T (1.0 mm Glass Plates)

Product Description/Introduction

This kit provides a simple and rapid preparation of 15% PAGE coloured (green) gels, enabling the simultaneous preparation of both resolving and stacking gels, allowing the user to prepare protein gels quickly by simply preparing the gel preparation equipment. At the same time, the kit contains a green dye in the stacker B, which makes it possible to visualise the spiking process and greatly improves the spiking efficiency. The green dye is stable in the stacker and does not migrate to the resolver with electrophoresis, thus not affecting the electrophoresis and staining effect. It is also easy to identify and excise the stacker after electrophoresis is completed, without affecting subsequent experiments such as Western Blot. The gels prepared in this kit can also be used for non-denaturing PAGE gel electrophoresis.

This kit prepares 50 gels of regular size, the number of gels prepared depends on the thickness of the gel and the size of the gel.

Storage and Shipping Conditions

Ship with wet ice; modified coagulant need to be stored at -20 ℃, other components need to be stored at 2-8 ℃ to avoid light, valid for 12 months.

Product Components

Component Number	Component	G2064
G2064-1	Stacker A	50 mL
G2064-2	Stacker B (Green)	50 mL
G2064-3	15% Resolver A	125 mL
G2064-4	15% Resolver B	125 mL
G5036-5ML	Modified Coagulant	1 mL×5
Manual		1 pc

Assay Protocol/Procedures

1. Choose appropriate Concentration of acrylamide solution according to molecular weight of target protein, refer to the table below:

PAGE Separating Gel Concentration	Optimal Separation Range (kDa) (Tris-Glycine Buffer, G2018)	Optimal Separation Range (kDa) (SWE Rapid High Resolution Running Buffer, G2081)
6%	50-300	15-300
8%	30-130	10-250
10%	20-100	5-150
12%	10-60	3-100
15%	<40	<60

2. According to the experimental requirements, mix solution A and B in equal proportion, add appropriate amount of modified coagulant promoter, and prepare the resolving solution and stacking solution respectively. Different specifications and different thickness of the glass plate can be adjusted in equal proportions to the stacking solution and resolving solution preparation volume, to the commonly used specifications of 8.3 cm × 7.3 cm gel plate (single), for example, the recommended preparation system is as follows table:

Configuration Groups	Components	0.75 mm Glass Plates	1.0 mm Glass Plates	1.5 mm Glass Plates
	15% Resolver A	2 mL	2.5 mL	4 mL
Resolver	15% Resolver B	2 mL	2.5 mL	4 mL
	Modified Coagulant	24 µL	30 µL	48 µL
	Stacker A	1 mL	1 mL	1.5 mL
Stacker	Stacker B (Green)	1 mL	1 mL	1.5 mL
	Modified Coagulant	12 µL	12 µL	18 µL

3. After assembling the gel tool, first add the prepared resolver, then use distilled water or ethanol and other solutions to seal the surface of the resolver, wait until the resolver to solidify sufficiently (about 10-15 min), discard the water or ethanol, and use the filter paper to suck up the residual water or ethanol, and then add the prepared stacker, insert the comb, and wait until it is solidified (about 10-15 min), and then can be used; or in the stacker can be added to join the prepared resolver immediately and slowly, uniformly added to the upper layer of the gel solution prepared, and insert the comb, and wait until it is solidified (about 10-15 min), and then can be used.

4. If the prepared gel cannot be used on the same day, it can be stored at 4°C for 1-2 days.

5. Recommended electrophoresis conditions:

6. a. Use SWE Fast High-Resolution Electrophoresis Buffer (G2081) for electrophoresis: 200-250 V, 25-35 min.

b. Use Tris-Glycine Electrophoresis Buffer (G2018) for electrophoresis: stacker 90 V, about 30 min (marker enters separation gel); resolver 150-180 V, about 60-90 min (can be adjusted according to actual situation).

Note

1. Too large a temperature difference in the process of making gel heat production may produce bubbles, it is recommended that A, B premixed solution is ready to return to room temperature, and then add modified coagulant for gelation, which can effectively avoid the formation of small bubbles in the gelation process.

2. The modified coagulant has better stability than ammonium persulfate (AP). After use, take out one and store it at 4°C for subsequent regular use. It can be stored for six months. If not used for a long time, please store it at -20°C to avoid repeated freezing and thawing.

3. The stacker B may produce flocculent precipitation after being left still for a long time. Please gently shake it before use to mix it evenly.

4. There is monomer acrylamide in the premixed solution, which is harmful to the human body. Please pay attention to protective measures during operation.

5. To ensure that the sample enters the separating gel at the same time, when directly casting the stacker, slowly and evenly add the prepared stacker.

6. After adding the modified coagulant, cast the gel as soon as possible and do not leave it for a long time.

7. Temperature has a significant effect on the solidification time of the gel. To ensure the smooth progress of the experiment, the lower the temperature, the longer the solidification time, and the amount of improved coagulant should be appropriately increased. The higher the temperature, the faster the gel solidifies, and the amount of improved coagulant can be appropriately reduced.

8. If you need to further accelerate the gel speed, add an appropriate amount of TEMED before casting the gel and increase the amount of modified coagulant by 0.5 times as needed.



Servicebio[®] BTT Fast-Cast Colorful (Red) Acrylamide Kit, 8%

Cat #: G2066-50T

Product Information

Product Name	Cat. No.	Spec.
BTT Fast-Cast Colorful (Red) Acrylamide Kit, 8%	G2066-50T	50 T

Product Description/Introduction

This kit provides a simple and rapid preparation of 8% PAGE coloured (red) gels, enabling the simultaneous preparation of both resolving and stacking gels, allowing the user to prepare protein gels quickly by simply preparing the gel preparation equipment. At the same time, the kit contains a red dye in the stacker B, which makes it possible to visualise the spiking process and greatly improves the spiking efficiency. The gels can be electrophoresed at a constant pressure of 200 V and take only 30 min to complete the electrophoresis process, which is less time consuming and provides better resolution than conventional gel electrophoresis systems. The gels prepared in this kit can also be used for non-denaturing PAGE gel electrophoresis.

This method does not need to add TEMED by itself when preparing, only the modified coagulant can form the gel, which greatly reduces the harm of TEMED to human body and the environment. This product is a modified Bis-Tris formulation gel, which needs to be used with matching electrophoresis buffer, and Tris-Glycine electrophoresis buffer cannot be used. The specific number of prepared gel blocks is related to the thickness of the gel and the size of the gel.

Storage and Shipping Conditions

Ship with wet ice; Modified procoagulant need to be stored at -20 °C, $25 \times \text{Tris}$ -MOPS SDS-PAGE buffer can be stored at room temperature; Other components need to be stored at 2-8 °C to avoid light, validity for 12 months.

Component Number	Component	G2066	
G2066-1	BTT Stacker A	50 mL	
G2066-2 BTT Stacker B (Red)		50 mL	
G2066-3	8% BTT Resolver A	125 mL	
G2066-4	8% BTT Resolver A	125 mL	
G5036-5ML	Modified Coagulant	1 mL×5	
C20E0 2E0MI	25×Tris-MOPS SDS-PAGE Buffer	2×250 mL	
G2050-250IVIL	Solution		
	1 pc		

Product Components

Assay Protocol/Procedures

1. Choose appropriate Concentration of PAGE resolver (separation gel) according to molecular weight of target protein, referring to the table below:

Concentration of acrylamide	Separation range
8%	≥35 kDa
10%	10-250 kDa



12%	10-100 kDa
1270	10 100 100

 According to the experimental requirements, mix solution A and B in equal proportion, add appropriate amount of modified coagulant, and prepare the resolving solution and stacking solution respectively. Different specifications and different thickness of the glass plate can be adjusted in equal proportions to the stacking solution and resolving solution preparation volume, to the commonly used specifications of 8.3 cm × 7.3 cm gel plate (single), for example, the recommended preparation system is as follows table;

Configuration	Components	0.75 mm Glass		1.5 mm Glass
Groups	components	Plates	Plates	Plates
	BTT 8% Resolver A	2 mL	2.5 mL	4 mL
Posolvor	BTT 8% Resolver B	2 mL	2.5 mL	4 mL
Nesolvei	Modified	90 JU	100 µL	160 µL
	Coagulant	ου με		
	BTT Stacker A	1 mL	1 mL	1.5 mL
Stacker	BTT Stacker B (Red)	1 mL	1 mL	1.5 mL
Slacker	Modified	40 ml	40	60 µL
	Coagulant	40 μL	40 μι	

- 3. After assembling the gel tool, first add the prepared resolver, then use distilled water or ethanol and other solutions to seal the surface of the resolver, wait until the resolver to solidify sufficiently (about 10-15 min), discard the water or ethanol, and use the filter paper to suck up the residual water or ethanol, and then add the prepared stacker, insert the comb, and wait until it is solidified (about 10-15 min), and then can be used; or in the stacker can be added to join the prepared resolver immediately and slowly, uniformly added to the upper layer of the gel solution prepared, and insert the comb, and wait until it is solidified (about 10-15 min), and then can be used;
- 4. If the prepared gel cannot be used on the same day, it can be stored at 4°C for 1-2 days;
- 5. Dilute BTT electrophoresis buffer (25×) into 1× electrophoresis buffer before electrophoresis (it is not recommended to reuse the electrophoresis buffer more than 2 times);
- 6. The electrophoresis can be done at constant voltage of 200 V throughout the electrophoresis, and the electrophoresis can be completed in about 30 minutes in general.

- Modified coagulant is more stable than ammonium persulfate (AP), take out one when using, save it at 4°C after using for subsequent routine use, it can be saved for six months; if it is not used for a long time, please save it at -20°C to avoid repeated freezing and thawing;
- 2. There is monomer acrylamide in the premixed solution, which is harmful to human body, please pay attention to the protective measures during operation;
- 3. In order to ensure that the samples enter the separation gel at the same time, when directly filling the stacker, it is necessary to slowly and evenly add the prepared stacker;
- 4. Fill the gel as soon as possible after adding the modified coagulant promoter, do not leave it for a long time;
- 5. If you need to further accelerate the gelation speed, you can increase the amount of modified coagulant by 0.5 times.
- 6. The temperature has a big influence on the solidification time of the gel, in order to ensure the smooth running of the experiment, generally the lower the temperature, the longer the solidification time, you



can appropriately increase the dosage of modified coagulant; the higher the temperature, the faster the gel, you can appropriately reduce the dosage of modified coagulant;

- 7. Our company also provides other colored (red, yellow, blue) sracker to distinguish different samples of different gel electrophoresis;
- The gel made by this kit is not compatible with Tris-Glycine electrophoresis buffer system, and can only be used with Tris-MOPS SDS-PAGE electrophoresis buffer included in the kit, and a single product of Tris-MOPS SDS-PAGE electrophoresis buffer (25×) is provided separately, for details, see G2050.



Servicebio[®] BTT Fast-Cast Colorful (Red) Acrylamide Kit, 8%

Cat #: G2066-50T

Product Information

Product Name	Cat. No.	Spec.
BTT Fast-Cast Colorful (Red) Acrylamide Kit, 8%	G2066-50T	50 T

Product Description/Introduction

This kit provides a simple and rapid preparation of 8% PAGE coloured (red) gels, enabling the simultaneous preparation of both resolving and stacking gels, allowing the user to prepare protein gels quickly by simply preparing the gel preparation equipment. At the same time, the kit contains a red dye in the stacker B, which makes it possible to visualise the spiking process and greatly improves the spiking efficiency. The gels can be electrophoresed at a constant pressure of 200 V and take only 30 min to complete the electrophoresis process, which is less time consuming and provides better resolution than conventional gel electrophoresis systems. The gels prepared in this kit can also be used for non-denaturing PAGE gel electrophoresis.

This method does not need to add TEMED by itself when preparing, only the modified coagulant can form the gel, which greatly reduces the harm of TEMED to human body and the environment. This product is a modified Bis-Tris formulation gel, which needs to be used with matching electrophoresis buffer, and Tris-Glycine electrophoresis buffer cannot be used. The specific number of prepared gel blocks is related to the thickness of the gel and the size of the gel.

Storage and Shipping Conditions

Ship with wet ice; Modified coagulant need to be stored at -20° C, $25 \times$ Tris-MOPS SDS-PAGE buffer can be stored at room temperature; Other components need to be stored at 2-8 °C to avoid light, valid for 12 months.

Component Number Component		G2066-50T
G2066-1	BTT Stacker A	50 mL
G2066-2	BTT Stacker B(Red)	50 mL
G2066-3	8% BTT Resolver A	125 mL
G2066-4	8% BTT Resolver B	125 mL
G5036-5ML	Modified Coagulant	1 mL×5
G2050-250ML	25×Tris-MOPS SDS-PAGE Buffer	2×250 mL
	1 pc	

Product Components

Assay Protocol/Procedures

1. Choose appropriate Concentration of PAGE resolver (separation gel) according to molecular weight of target protein, referring to the table below:

Concentration of acrylamide	Separation range
8%	≥35 kDa
10%	10-250 kDa
12%	10-100 kDa



2. According to the experimental requirements, mix solution A and B in equal proportion, add appropriate amount of modified coagulant, and prepare the resolving solution and stacking solution respectively. Different specifications and different thickness of the glass plate can be adjusted in equal proportions to the stacking solution and resolving solution preparation volume, to the commonly used specifications of 8.3 cm × 7.3 cm gel plate (single), for example, the recommended preparation system is as follows table;

Configuration	Componento	0.75 mm Glass	1.0 mm Glass	1.5 mm Glass
Groups	Components	Plates	Plates	Plates
	BTT 8% Resolver A	2 mL	2.5 mL	4 mL
Posolvor	BTT 8% Resolver B	2 mL	2.5 mL	4 mL
Resolver	Modified 40 ut		50	90 Jul
	Coagulant	40 μL	50 με	ου με
	BTT Stacker A	1 mL	1 mL	1.5 mL
Stacker	BTT Stacker B (Red)	1 mL	1 mL	1.5 mL
Slacker	Modified	20	20	20
	Coagulant	20 μι	20 με	50 μι

- 3. After assembling the gel tool, first add the prepared resolver, then use distilled water or ethanol and other solutions to seal the surface of the resolver, wait until the resolver to solidify sufficiently (about 10-15 min), discard the water or ethanol, and use the filter paper to suck up the residual water or ethanol, and then add the prepared stacker, insert the comb, and wait until it is solidified (about 10-15 min), and then can be used; or in the stacker can be added to join the prepared resolver immediately and slowly, uniformly added to the upper layer of the gel solution prepared, and insert the comb, and wait until it is solidified (about 10-15 min), and then can be used;
- 4. If the prepared gel cannot be used on the same day, it can be stored at 4°C for 1-2 days;
- 5. Dilute BTT electrophoresis buffer (25×) into 1× electrophoresis buffer before electrophoresis (it is not recommended to reuse the electrophoresis buffer more than 2 times);
- 6. The electrophoresis can be done at constant voltage of 200 V throughout the electrophoresis, and the electrophoresis can be completed in about 30 minutes in general.

- 1. Too large a temperature difference in the process of making gel heat production may produce bubbles, it is recommended that A, B premixed solution is ready to return to room temperature, and then add modified coagulant for gelation, which can effectively avoid the formation of small bubbles in the gelation process.
- Modified coagulant is more stable than ammonium persulfate (AP), take out one when using, save it at 4°C after using for subsequent routine use, it can be saved for six months; if it is not used for a long time, please save it at -20°C to avoid repeated freezing and thawing;
- 3. There is monomer acrylamide in the premixed solution, which is harmful to human body, please pay attention to the protective measures during operation;
- 4. In order to ensure that the samples enter the separation gel at the same time, when directly filling the stacker, it is necessary to slowly and evenly add the prepared stacker.
- 5. Fill the gel as soon as possible after adding the modified coagulant, do not leave it for a long time;
- 6. If you need to further accelerate the gelation speed, you can increase the amount of modified coagulant by 0.5 times.
- 7. The temperature has a big influence on the solidification time of the gel, in order to ensure the smooth



running of the experiment, generally the lower the temperature, the longer the solidification time, you can appropriately increase the dosage of modified coagulant; the higher the temperature, the faster the gel, you can appropriately reduce the dosage of modified coagulant;

- 8. Our company also provides other colored (red, yellow, blue) stacker to distinguish different samples of different gel electrophoresis;
- 9. The gel made by this kit is not compatible with Tris-Glycine electrophoresis buffer system, and can only be used with Tris-MOPS SDS-PAGE electrophoresis buffer included in the kit, and a single product of Tris-MOPS SDS-PAGE electrophoresis buffer (25×) is provided separately, for details, see G2050.



Servicebio[®] BTT Fast-Cast Colorful (Red) Acrylamide Kit, 12%

Cat #: G2068-50T

Product Information

Product Name	Cat. No.	Spec.
BTT Fast-Cast Colorful (Red) Acrylamide Kit, 12%	G2068-50T	50 T

Product Description/Introduction

This kit provides a simple and rapid preparation of 12% PAGE coloured (red) gels, enabling the simultaneous preparation of both resolving and stacking gels, allowing the user to prepare protein gels quickly by simply preparing the gel preparation equipment. At the same time, the kit contains a red dye in the stacker B, which makes it possible to visualise the spiking process and greatly improves the spiking efficiency. The gels can be electrophoresed at a constant pressure of 200 V and take only 30 min to complete the electrophoresis process, which is less time consuming and provides better resolution than conventional gel electrophoresis systems. The gels prepared in this kit can also be used for non-denaturing PAGE gel electrophoresis.

This method does not need to add TEMED by itself when preparing, only the modified coagulant can form the gel, which greatly reduces the harm of TEMED to human body and the environment. This product is a modified Bis-Tris formulation gel, which needs to be used with matching electrophoresis buffer, and Tris-Glycine electrophoresis buffer cannot be used. The specific number of prepared gel blocks is related to the thickness of the gel and the size of the gel.

Storage and Shipping Conditions

Ship with wet ice; Modified coagulant need to be stored at -20° C, $25 \times Tris-MOPS$ SDS-PAGE buffer can be stored at room temperature; Other components need to be stored at $2-8^{\circ}$ C to avoid light, valid for 12 months.

Component Number	Component	G2068-50T
G2068-1	BTT Stacker A	50 mL
G2068-2	BTT Stacker B (Red)	50 mL
G2068-3	12% BTT Resolver A	125 mL
G2068-4	12% BTT Resolver B	125 mL
G5036-5ML	Modified Coagulant	1 mL×5
G2050-250ML 25×Tris-MOPS SDS-PAGE Buffer Solution		2×250 mL
	User manual	1 pc

Product Components

Assay Protocol/Procedures

1. Choose appropriate Concentration of PAGE resolver (separation gel) according to molecular weight of target protein, referring to the table below:

Concentration of acrylamide	Separation range
8%	≥35 kDa
10%	10-250 kDa
12%	10-100 kDa



2. According to the experimental requirements, mix solution A and B in equal proportion, add appropriate amount of modified coagulant, and prepare the resolving solution and stacking solution respectively. Different specifications and different thickness of the glass plate can be adjusted in equal proportions to the stacking solution and resolving solution preparation volume, to the commonly used specifications of 8.3 cm × 7.3 cm gel plate (single), for example, the recommended preparation system is as follows table:

Configuration	Componente	0.75 mm Glass	1.0 mm Glass	1.5 mm Glass
Groups	Components	Plates	Plates	Plates
	BTT 12% Resolver A	2 mL	2.5 mL	4 mL
Resolver	BTT 12% Resolver B	2 mL	2.5 mL	4 mL
	Modified Coagulant	24 µL	30 µL	48 μL
Stacker	BTT Stacker A	1 mL	1 mL	1.5 mL
	BTT Stacker B (Red)	1 mL	1 mL	1.5 mL
	Modified Coagulant	20 µL	20 µL	30 µL

- 3. After assembling the gel tool, first add the prepared resolver, then use distilled water or ethanol and other solutions to seal the surface of the resolver, wait until the resolver to solidify sufficiently (about 10-15 min), discard the water or ethanol, and use the filter paper to suck up the residual water or ethanol, and then add the prepared stacker, insert the comb, and wait until it is solidified (about 10-15 min), and then can be used; or in the stacker can be added to join the prepared resolver immediately and slowly, uniformly added to the upper layer of the gel solution prepared, and insert the comb, and wait until it is solidified (about 10-15 min), and then can be used;
- 4. If the prepared gel cannot be used on the same day, it can be stored at 4°C for 1-2 days;
- 5. Dilute BTT electrophoresis buffer (25×) into 1× electrophoresis buffer before electrophoresis (it is not recommended to reuse the electrophoresis buffer more than 2 times);
- 6. The electrophoresis can be done at constant voltage of 200 V throughout the electrophoresis, and the electrophoresis can be completed in about 30 minutes in general.

- 1. Too large a temperature difference in the process of making gel heat production may produce bubbles, it is recommended that A, B premixed solution is ready to return to room temperature, and then add modified coagulant for gelation, which can effectively avoid the formation of small bubbles in the gelation process.
- Modified coagulant is more stable than ammonium persulfate (AP), take out one when using, save it at 4°C after using for subsequent routine use, it can be saved for six months; if it is not used for a long time, please save it at -20°C to avoid repeated freezing and thawing;
- 3. There is monomer acrylamide in the premixed solution, which is harmful to human body, please pay attention to the protective measures during operation;
- 4. In order to ensure that the samples enter the separation gel at the same time, when directly filling the stacker, it is necessary to slowly and evenly add the prepared stacker.
- 5. Fill the gel as soon as possible after adding the modified coagulant, do not leave it for a long time;
- 6. If you need to further accelerate the gelation speed, you can increase the amount of modified coagulant by 0.5 times.
- 7. The temperature has a big influence on the solidification time of the gel, in order to ensure the smooth running of the experiment, generally the lower the temperature, the longer the solidification time, you can appropriately increase the dosage of modified coagulant; the higher the temperature, the faster



the gel, you can appropriately reduce the dosage of modified coagulant;

- 8. Our company also provides other colored (red, yellow, blue) stacker to distinguish different samples of different gel electrophoresis;
- The gel made by this kit is not compatible with Tris-Glycine electrophoresis buffer system, and can only be used with Tris-MOPS SDS-PAGE electrophoresis buffer included in the kit, and a single product of Tris-MOPS SDS-PAGE electrophoresis buffer (25×) is provided separately, for details, see G2050.



Servicebio[®] BTT Fast-Cast Colorful (Green) Acrylamide Kit, 8%

Cat #: G2071-50T

Product Information

Product Name	Cat. No.	Spec.
BTT Fast-Cast Colorful (Green) Acrylamide Kit, 8%	G2071-50T	50 T

Product Description/Introduction

This kit provides a simple and rapid preparation of 8% PAGE coloured (green) gels, enabling the simultaneous preparation of both resolving and stacking gels, allowing the user to prepare protein gels quickly by simply preparing the gel preparation equipment. At the same time, the kit contains a green dye in the stacker B, which makes it possible to visualise the spiking process and greatly improves the spiking efficiency. The gels can be electrophoresed at a constant pressure of 200 V and take only 30 min to complete the electrophoresis process, which is less time consuming and provides better resolution than conventional gel electrophoresis systems. The gels prepared in this kit can also be used for non-denaturing PAGE gel electrophoresis.

This method does not need to add TEMED by itself when preparing, only the modified coagulant can form the gel, which greatly reduces the harm of TEMED to human body and the environment. This product is a modified Bis-Tris formulation gel, which needs to be used with matching electrophoresis buffer, and Tris-Glycine electrophoresis buffer cannot be used. The specific number of prepared gel blocks is related to the thickness of the gel and the size of the gel.

Storage and Shipping Conditions

Ship with wet ice; Modified coagulant need to be stored at -20°C, 25×Tris-MOPS SDS-PAGE buffer can be stored at room temperature; Other components need to be stored at 2-8°C to avoid light, valid for 12 months.

Component Number	Component	G2071-50T
G2071-1	BTT Stacker A	50 mL
G2071-2	BTT Stacker B (Green)	50 mL
G2071-3	8% BTT Resolver A	125 mL
G2071-4	8% BTT Resolver B	125 mL
G5036-5ML	Modified Coagulant	1 mL×5
G2050-250ML	25×Tris-MOPS SDS-PAGE Buffer Solution	2×250 mL
	User Manual	1 pc

Product Components

Assay Protocol/Procedures

1. Choose appropriate Concentration of PAGE resolver (separation gel) according to molecular weight of target protein, referring to the table below:

Concentration of acrylamide	Separation range
8%	≥35 kDa
10%	10-250 kDa



12%	10-100 kDa

2. According to the experimental requirements, mix solution A and B in equal proportion, add appropriate amount of modified coagulant, and prepare the resolving solution and stacking solution respectively. Different specifications and different thickness of the glass plate can be adjusted in equal proportions to the stacking solution and resolving solution preparation volume, to the commonly used specifications of 8.3 cm × 7.3 cm gel plate (single), for example, the recommended preparation system is as follows table:

Configuration	Components	0.75 mm Glass	1.0 mm Glass	1.5 mm
Groups	Components	Plates	Plates	Glass Plates
	BTT 8% Resolver A	2 mL	2.5 mL	4 mL
Resolver	BTT 8% Resolver B	2 mL	2.5 mL	4 mL
	Modified Coagulant	40 µL	50 μL	80 µL
	BTT Stacker A	1 mL	1 mL	1.5 mL
Stacker	BTT Stacker B (Green)	1 mL	1 mL	1.5 mL
	Modified Coagulant	20 µL	20 µL	30 µL

- 3. After assembling the gel tool, first add the prepared resolver, then use distilled water or ethanol and other solutions to seal the surface of the resolver, wait until the resolver to solidify sufficiently (about 10-15 min), discard the water or ethanol, and use the filter paper to suck up the residual water or ethanol, and then add the prepared stacker, insert the comb, and wait until it is solidified (about 10-15 min), and then can be used; or in the stacker can be added to join the prepared resolver immediately and slowly, uniformly added to the upper layer of the gel solution prepared, and insert the comb, and wait until it is solidified (about 10-15 min), and then can be used;
- 4. If the prepared gel cannot be used on the same day, it can be stored at 4° for 1-2 days;
- 5. Dilute BTT electrophoresis buffer (25×) into 1× electrophoresis buffer before electrophoresis (it is not recommended to reuse the electrophoresis buffer more than 2 times);
- 6. The electrophoresis can be done at constant voltage of 200 V throughout the electrophoresis, and the electrophoresis can be completed in about 30 minutes in general.

- 1. Too large a temperature difference in the process of making gel heat production may produce bubbles, it is recommended that A, B premixed solution is ready to return to room temperature, and then add modified coagulant for gelation, which can effectively avoid the formation of small bubbles in the gelation process.
- Modified coagulant is more stable than ammonium persulfate (AP), take out one when using, save it at 4°C after using for subsequent routine use, it can be saved for six months; if it is not used for a long time, please save it at -20°C to avoid repeated freezing and thawing;
- 3. There is monomer acrylamide in the premixed solution, which is harmful to human body, please pay attention to the protective measures during operation;
- 4. In order to ensure that the samples enter the separation gel at the same time, when directly filling the stacker, it is necessary to slowly and evenly add the prepared stacker;
- 5. Fill the gel as soon as possible after adding the modified coagulant promoter, do not leave it for a long time;
- 6. If you need to further accelerate the gelation speed, you can increase the amount of modified coagulant by 0.5 times.
- 7. The temperature has a big influence on the solidification time of the gel, in order to ensure the smooth



running of the experiment, generally the lower the temperature, the longer the solidification time, you can appropriately increase the dosage of modified coagulant; the higher the temperature, the faster the gel, you can appropriately reduce the dosage of modified coagulant;

- 8. Our company also provides other colored (red, yellow, blue) sracker to distinguish different samples of different gel electrophoresis;
- 9. The gel made by this kit is not compatible with Tris-Glycine electrophoresis buffer system, and can only be used with Tris-MOPS SDS-PAGE electrophoresis buffer included in the kit, and a single product of Tris-MOPS SDS-PAGE electrophoresis buffer (25×) is provided separately, for details, see G2050.



Servicebio® BTT Fast-Cast Colorful (Green) Acrylamide Kit, 10%

Cat #: G2072-50T

Product Information

Product Name	Cat. No.	Spec.
BTT Fast-Cast Colorful (Green) Acrylamide Kit, 10%	G2072-50T	50 T

Product Description/Introduction

This kit provides a simple and rapid preparation of 10% PAGE coloured (green) gels, enabling the simultaneous preparation of both resolving and stacking gels, allowing the user to prepare protein gels quickly by simply preparing the gel preparation equipment. At the same time, the kit contains a green dye in the stacker B, which makes it possible to visualise the spiking process and greatly improves the spiking efficiency. The gels can be electrophoresed at a constant pressure of 200 V and take only 30 min to complete the electrophoresis process, which is less time consuming and provides better resolution than conventional gel electrophoresis systems. The gels prepared in this kit can also be used for non-denaturing PAGE gel electrophoresis.

This method does not need to add TEMED by itself when preparing, only the modified coagulant can form the gel, which greatly reduces the harm of TEMED to human body and the environment. This product is a modified Bis-Tris formulation gel, which needs to be used with matching electrophoresis buffer, and Tris-Glycine electrophoresis buffer cannot be used. The specific number of prepared gel blocks is related to the thickness of the gel and the size of the gel.

Storage and Shipping Conditions

Ship with wet ice; Modified coagulant need to be stored at -20°C, 25×Tris-MOPS SDS-PAGE buffer can be stored at room temperature; Other components need to be stored at 2-8°C to avoid light, valid for 12 months.

Component Number	Component	G2072-50T
G2072-1	BTT Stacker A	50 mL
G2072-2	BTT Stacker B (green)	50 mL
G2072-3	10% BTT Resolver A	125 mL
G2072-4	10% BTT Resolver B	125 mL
G5036-5ML	Modified Coagulant	1 mL×5
G2050-250ML	25×Tris-MOPS SDS-PAGE Buffer Solution	2×250 mL
	User Manual	1 pc

Product Components

Assay Protocol/Procedures

1. Choose appropriate Concentration of PAGE resolver (separation gel) according to molecular weight of target protein, referring to the table below:

Concentration of acrylamide	Separation range
8%	≥35 kDa
10%	10-250 kDa



12%	10-100 kDa

2. According to the experimental requirements, mix solution A and B in equal proportion, add appropriate amount of modified coagulant, and prepare the resolving solution and stacking solution respectively. Different specifications and different thickness of the glass plate can be adjusted in equal proportions to the stacking solution and resolving solution preparation volume, to the commonly used specifications of 8.3 cm × 7.3 cm gel plate (single), for example, the recommended preparation system is as follows table:

Configuration	Components	0.75 mm Glass	1.0 mm Glass	1.5 mm Glass
Groups	Components	Plates	Plates	Plates
Resolver	BTT 10% Resolver A	2 mL	2.5 mL	4 mL
	BTT 10% Resolver B	2 mL	2.5 mL	4 mL
	Modified Coagulant	24 μL	30 µL	48 μL
	BTT Stacker A	1 mL	1 mL	1.5 mL
Stacker	BTT Stacker B (Green)	1 mL	1 mL	1.5 mL
	Modified Coagulant	12 μL	12 µL	18 µL

- 3. After assembling the gel tool, first add the prepared resolver, then use distilled water or ethanol and other solutions to seal the surface of the resolver, wait until the resolver to solidify sufficiently (about 10-15 min), discard the water or ethanol, and use the filter paper to suck up the residual water or ethanol, and then add the prepared stacker, insert the comb, and wait until it is solidified (about 10-15 min), and then can be used; or in the stacker can be added to join the prepared resolver immediately and slowly, uniformly added to the upper layer of the gel solution prepared, and insert the comb, and wait until it is solidified (about 10-15 min), and then can be used;
- 4. If the prepared gel cannot be used on the same day, it can be stored at 4° for 1-2 days;
- 5. Dilute BTT electrophoresis buffer (25×) into 1× electrophoresis buffer before electrophoresis (it is not recommended to reuse the electrophoresis buffer more than 2 times);
- 6. The electrophoresis can be done at constant voltage of 200 V throughout the electrophoresis, and the electrophoresis can be completed in about 30 minutes in general.

- 1. Too large a temperature difference in the process of making gel heat production may produce bubbles, it is recommended that A, B premixed solution is ready to return to room temperature, and then add modified coagulant for gelation, which can effectively avoid the formation of small bubbles in the gelation process.
- Modified coagulant is more stable than ammonium persulfate (AP), take out one when using, save it at 4°C after using for subsequent routine use, it can be saved for six months; if it is not used for a long time, please save it at -20°C to avoid repeated freezing and thawing;
- 3. There is monomer acrylamide in the premixed solution, which is harmful to human body, please pay attention to the protective measures during operation;
- 4. In order to ensure that the samples enter the separation gel at the same time, when directly filling the stacker, it is necessary to slowly and evenly add the prepared stacker.
- 5. Fill the gel as soon as possible after adding the modified coagulant, do not leave it for a long time;
- 6. If you need to further accelerate the gelation speed, you can increase the amount of modified coagulant by 0.5 times.
- 7. The temperature has a big influence on the solidification time of the gel, in order to ensure the smooth running of the experiment, generally the lower the temperature, the longer the solidification time, you



can appropriately increase the dosage of modified coagulant; the higher the temperature, the faster the gel, you can appropriately reduce the dosage of modified coagulant;

- 8. Our company also provides other colored (red, yellow, blue) stacker to distinguish different samples of different gel electrophoresis;
- The gel made by this kit is not compatible with Tris-Glycine electrophoresis buffer system, and can only be used with Tris-MOPS SDS-PAGE electrophoresis buffer included in the kit, and a single product of Tris-MOPS SDS-PAGE electrophoresis buffer (25×) is provided separately, for details, see G2050.



Servicebio® BTT Fast-Cast Colorful (Green) Acrylamide Kit, 12%

Cat #: G2073-50T

Product Information

Product Name	Cat. No.	Spec.
BTT Fast-Cast Colorful (Green) Acrylamide Kit, 12%	G2073-50T	50 T

Product Description/Introduction

This kit provides a simple and rapid preparation of 12% PAGE coloured (green) gels, enabling the simultaneous preparation of both resolving and stacking gels, allowing the user to prepare protein gels quickly by simply preparing the gel preparation equipment. At the same time, the kit contains a green dye in the stacker B, which makes it possible to visualise the spiking process and greatly improves the spiking efficiency. The gels can be electrophoresed at a constant pressure of 200 V and take only 30 min to complete the electrophoresis process, which is less time consuming and provides better resolution than conventional gel electrophoresis systems. The gels prepared in this kit can also be used for non-denaturing PAGE gel electrophoresis.

This method does not need to add TEMED by itself when preparing, only the modified coagulant can form the gel, which greatly reduces the harm of TEMED to human body and the environment. This product is a modified Bis-Tris formulation gel, which needs to be used with matching electrophoresis buffer, and Tris-Glycine electrophoresis buffer cannot be used. The specific number of prepared gel blocks is related to the thickness of the gel and the size of the gel.

Storage and Shipping Conditions

Ship with wet ice; Modified coagulant need to be stored at -20°C, 25×Tris-MOPS SDS-PAGE buffer can be stored at room temperature; Other components need to be stored at 2-8°C to avoid light, valid for 12 months.

Component Number	Component	G2073-50T
G2073-1	BTT Stacker A	50 mL
G2073-2	BTT Stacker B (green)	50 mL
G2073-3	12% BTT Resolver A	125 mL
G2073-4	12% BTT Resolver B	125 mL
G5036-5ML	Modified Coagulant	1 mL×5
G2050-250ML	25×Tris-MOPS SDS-PAGE Buffer Solution	2×250 mL
	User Manual	1 pc

Product Components

Assay Protocol/Procedures

1. Choose appropriate Concentration of PAGE resolver (separation gel) according to molecular weight of target protein, referring to the table below:

Concentration of acrylamide	Separation range	
8%	≥35 kDa	
10%	10-250 kDa	
12%	10-100 kDa	



2. According to the experimental requirements, mix solution A and B in equal proportion, add appropriate amount of modified coagulant, and prepare the resolving solution and stacking solution respectively. Different specifications and different thickness of the glass plate can be adjusted in equal proportions to the stacking solution and resolving solution preparation volume, to the commonly used specifications of 8.3 cm × 7.3 cm gel plate (single), for example, the recommended preparation system is as follows table:

Configuration	Componente	0.75 mm Glass	1.0 mm Glass	1.5 mm Glass
Groups	components	Plates	Plates	Plates
Resolver	BTT 12% Resolver A	2 mL	2.5 mL	4 mL
	BTT 12% Resolver B	2 mL	2.5 mL	4 mL
	Modified Coagulant	24 μL	30 µL	48 µL
Stacker	BTT Stacker A	1 mL	1 mL	1.5 mL
	BTT Stacker B (Green)	1 mL	1 mL	1.5 mL
	Modified Coagulant	20 µL	20 µL	30 µL

- 3. After assembling the gel tool, first add the prepared resolver, then use distilled water or ethanol and other solutions to seal the surface of the resolver, wait until the resolver to solidify sufficiently (about 10-15 min), discard the water or ethanol, and use the filter paper to suck up the residual water or ethanol, and then add the prepared stacker, insert the comb, and wait until it is solidified (about 10-15 min), and then can be used; or in the stacker can be added to join the prepared resolver immediately and slowly, uniformly added to the upper layer of the gel solution prepared, and insert the comb, and wait until it is solidified (about 10-15 min), and then can be used;
- 4. If the prepared gel cannot be used on the same day, it can be stored at 4°C for 1-2 days;
- 5. Dilute BTT electrophoresis buffer (25×) into 1× electrophoresis buffer before electrophoresis (it is not recommended to reuse the electrophoresis buffer more than 2 times);
- 6. The electrophoresis can be done at constant voltage of 200 V throughout the electrophoresis, and the electrophoresis can be completed in about 30 minutes in general.

- 1. Too large a temperature difference in the process of making gel heat production may produce bubbles, it is recommended that A, B premixed solution is ready to return to room temperature, and then add modified coagulant for gelation, which can effectively avoid the formation of small bubbles in the gelation process.
- Modified coagulant is more stable than ammonium persulfate (AP), take out one when using, save it at 4°C after using for subsequent routine use, it can be saved for six months; if it is not used for a long time, please save it at -20°C to avoid repeated freezing and thawing;
- 3. There is monomer acrylamide in the premixed solution, which is harmful to human body, please pay attention to the protective measures during operation;
- 4. In order to ensure that the samples enter the separation gel at the same time, when directly filling the stacker, it is necessary to slowly and evenly add the prepared stacker.
- 5. Fill the gel as soon as possible after adding the modified coagulant, do not leave it for a long time;
- 6. If you need to further accelerate the gelation speed, you can increase the amount of modified coagulant by 0.5 times.
- 7. The temperature has a big influence on the solidification time of the gel, in order to ensure the smooth running of the experiment, generally the lower the temperature, the longer the solidification time, you can appropriately increase the dosage of modified coagulant; the higher the temperature, the faster



the gel, you can appropriately reduce the dosage of modified coagulant;

- 8. Our company also provides other colored (red, yellow, blue) stacker to distinguish different samples of different gel electrophoresis;
- The gel made by this kit is not compatible with Tris-Glycine electrophoresis buffer system, and can only be used with Tris-MOPS SDS-PAGE electrophoresis buffer included in the kit, and a single product of Tris-MOPS SDS-PAGE electrophoresis buffer (25×) is provided separately, for details, see G2050.

PAGE Colour (Red) Gel Cast Kit (High Molecular Protein Separation)

The Tris-Acetate system is specifically used for the separation of large molecular proteins (equal to or greater than 300 kDa).



Cat.No.: G2155-50T
Brand : Servicebio
Spec.: 50 T (High Molecular Protein Separation)



Product Introduction	
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Product Information

Product Name	Cat. No.	Spec.
PAGE Colour (Red) Gel Cast Kit (High Molecular Protein Separation)	G2155-50T	50 T

Product Description/Introduction

This kit provides a simple and rapid preparation reagent for PAGE colored (red) gel Cast Kit capable of simultaneously preparing stacking, resolving, and upper gels. Users only need to prepare the gel casting apparatus to rapidly prepare protein gels. Additionally, the solution B in the stacker gel of the kit contains a red dye, allowing for clear visualization of protein sample wells, greatly enhancing the efficiency of sample loading. This red dye can stably exist in the stacker gel without migrating to the resolver gel during electrophoresis, thus not affecting electrophoresis and staining results. It is also easy to identify and excise the stacker gel after electrophoresis completion, without impacting subsequent experiments such as Western Blot. The gel prepared in this kit does not contain SDS and can be used for denaturing or non-denaturing PAGE gel electrophoresis, which is specially used for the separation of large molecular proteins (≥300 kDa); the concentration of the stacker gel is 3%, and the concentration of the resolver gel is 7% after the formulation.

Storage and Shipping Conditions

Ship with wet ice; Modified coagulant stored at -20°C, others stored at 2-8°C away from light, valid for 12 months.

Product Components

Component number	Component	G2159-50T
G2155-1	Stacker A	50 mL
G2155-2	Stacker B (Red)	50 mL
G2155-3	Resolver A	125 mL
G2155-4	Resolver B	125 mL
G5036-5ML	Modified Coagulant	1 mL×5
User Manual		1 pc

Assay Protocol/Procedures

1. According to the experimental requirements, mix solutions A and B in proportion, add an appropriate amount of modified coagulant (see table below), and prepare the resovler and stacker soultions separately; different specifications and thicknesses of glass plates can adjust the preparation volume of the stacker and resolver solutions in proportion. Taking the commonly used 8.3 cm × 7.3 cm gel plate (single piece) as an example, the recommended preparation system is as follows in the table:

Configuration Groups	Components	0.75 mm Glass	1.0 mm Glass	1.5 mm Glass
		1 18165	1 18163	1 18163
	Resolver A	2 mL	2.5 mL	4 mL
Resolver	Resolver B	2 mL	2.5 mL	4 mL
	Modified Coagulant	24 µL	30 µL	48 µL
	Stacker A	1 mL	1 mL	1.5 mL
Stacker	Stacker B (Red)	1 mL	1 mL	1.5 mL
	Modified Coagulant	12 µL	12 µL	18 µL

2. After assembling the gel tool, first add the prepared resolver, then use distilled water or ethanol and other solutions to seal the surface of the resolver, wait until the resolver to solidify sufficiently (about 10-15 min), discard the water or ethanol, and use the filter paper to suck up the residual water or ethanol. Add the prepared stacker, insert the comb, and allow it to solidify (about 10-15 minutes), and then can be used. Alternatively, after adding the prepared resolver, slowly and evenly add the prepared stacker, insert the comb, and allow it to solidify (about 10-15 minutes), and then can be used.

3. If the prepared gel cannot be used on the same day, it can be stored at 4°C for 1-2 days.

4. Recommended electrophoresis conditions:

Perform electrophoresis using Tris-Acetate SDS-PAGE Running Buffer (Powder) (G2141): 100 V, 60-90 min. Note

1. Too large a temperature difference in the process of making gel heat production may produce bubbles, it is recommended that A, B premixed solution is ready to return to room temperature, and then add modified coagulant for gelation, which can effectively avoid the formation of small bubbles in the gelation process.

The modified coagulant has better stability than ammonium persulfate (AP). After use, take out one and store it at 4°C for subsequent regular use. It can be stored for six months. If not used for a long time, please store it at -20°C to avoid repeated freezing and thawing.
 The stacker B may produce flocculent precipitation after being left still for a long time. Please gently shake it before use to mix it evenly.

4. There is monomer acrylamide in the premixed solution, which is harmful to the human body. Please pay attention to protective measures during operation.

5. To ensure that the sample enters the separating gel at the same time, when directly casting the stacker, slowly and evenly add the prepared stacker.

6. After adding the modified coagulant, cast the gel as soon as possible and do not leave it for a long time.

7. Temperature has a significant effect on the solidification time of the gel. To ensure the smooth progress of the experiment, the lower the temperature, the longer the solidification time, and the amount of improved coagulant should be appropriately increased. The higher the temperature, the faster the gel solidifies, and the amount of improved coagulant can be appropriately reduced.

8. If you need to further accelerate the gel speed, add an appropriate amount of TEMED before casting the gel and increase the amount of modified coagulant by 0.5 times as needed.

9. We also provide other colored (green, yellow, blue) stacker to distinguish different samples for gel electrophoresis.

10. For your safety and health, please wear laboratory clothes and disposable gloves during operation.



Servicebio® SDS-PAGE Colour (Red) Gel Cast Kit (Low Molecular Protein Separation, Tricine System)

Cat #: G2159

Product Information

Product Name	Cat. No.	Spec.
SDS-PAGE Colour (Red) Gel Cast Kit (Low Molecular	C21E0 E0T	FOT
Protein Separation, Tricine System)	G2139-301	50 1

Product Description/Introduction

This kit provides a simple and rapid preparation reagent for SDS-PAGE colored (red) gel (low molecular weight protein separation, Tricine system), capable of simultaneously preparing stacking, spacer and resolving gels. Users only need to prepare the gel casting apparatus to rapidly prepare protein gels. Additionally, the solution B in the stacking gel of the kit contains a red dye, allowing for clear visualization of protein sample wells, greatly enhancing the efficiency of sample loading. This red dye can stably exist in the stacking gel without migrating to the resolving gel during electrophoresis, thus not affecting electrophoresis and staining results. It is also easy to identify and excise the stacking gel after electrophoresis completion, without impacting subsequent experiments such as Western Blot. Gels prepared with this kit are specifically designed for the separation of low molecular weight proteins (\leq 20 kDa). After formulation, the concentration of the stacking gel is 4%, the concentration of the spacer/resolving gel, spacer and stacking gel is 10%, and the concentration of the resolving gel is 16%.

Storage and Shipping Conditions

Ship with wet ice; Modified coagulant stored at -20° C, others stored at $2-8^{\circ}$ C away from light, valid for 12 months.

Component number	Component	G2159-50T
G2159-1	Stacker A	50 mL
G2159-2	Stacker B (Red)	50 mL
G2159-3	Spacer A	45 mL
G2159-4	Resolver A	90 mL
G2159-5	Spacer/Resolver B	125 mL
G5036-5ML	Modified Coagulant	1 mL×5
User Manual		1 pc

Product Components

Assay Protocol/Procedures

 According to the experimental requirements, mix solutions A and B in proportion, add an appropriate amount of modified coagulant (see table below), and prepare the stacker and resolver soultions separately; different specifications and thicknesses of glass plates can adjust the preparation volume of the stacker and resolver solutions in proportion. Taking the commonly used 8.3 cm × 7.3 cm gel plate (single piece) as an example, the recommended preparation system is as follows in the table:

Configuration	Components	0.75 mm Glass	1.0 mm Glass	1.5 mm Glass
Groups		Plates	Plates	Plates



	Resolver A	1.2 mL	1.5 mL	2.4 mL
Resolver	Spacer/Resolver B	1.2 mL	1.5 mL	2.4mL
	Modified Coagulant	14 µL	18 µL	28 µL
	Spacer A	0.6 mL	0.75 mL	1.2 mL
Spacer	Spacer/Resolver B	0.6 mL	0.75 mL	1.2mL
	Modified Coagulant	7 μL	9 μL	14 µL
	Stacker A	1 mL	1 mL	1.5 mL
Stacker	Stacker B (Red)	1 mL	1 mL	1.5 mL
	Modified Coagulant	12 µL	12 µL	18 µL

- After assembling the gel tool, first add the prepared resolver, then use distilled water or ethanol and other solutions to seal the surface of the resolver, wait until the resolver to solidify sufficiently (about 10-15 min), discard the water or ethanol, and use the filter paper to suck up the residual water or ethanol.
- 3. Add the prepared spacer, then seal the surface of the spacer gel with distilled water or ethanol, wait for the middle gel to solidify sufficiently (about 10-15 minutes), discard the water or ethanol, and use filter paper to suck up the residual water or ethanol.
- 4. Add the prepared stacker, insert the comb, and allow it to solidify (about 10-15 minutes), and then can be used. Alternatively, after adding the prepared spacer, slowly and evenly add the prepared stacker, insert the comb, and allow it to solidify (about 10-15 minutes), and then can be used.
- Recommended electrophoresis conditions:
 Perform ice bath electrophoresis using Tricine SDS-PAGE Running Buffer (Powder) (G2142): 100 V, 180-240 min.

- 1. Too large a temperature difference in the process of making gel heat production may produce bubbles, it is recommended that A, B premixed solution is ready to return to room temperature, and then add modified coagulant for gelation, which can effectively avoid the formation of small bubbles in the gelation process.
- 2. The modified coagulant has better stability than ammonium persulfate (AP). After use, take out one and store it at 4°C for subsequent regular use. It can be stored for six months. If not used for a long time, please store it at -20°C to avoid repeated freezing and thawing.
- 3. The recommended formulation system table is only applicable to the electrophoresis apparatus produced by our company. The volumes of spacer and resolving gels required for different manufacturers' electrophoresis apparatus may vary slightly. Please make appropriate adjustments. Generally, the volume of spacer gel : resolving gel is 1:2, and ensure that the comb does not touch the spacer gel after insertion. The optimal distance from the bottom of the comb teeth to the spacer gel is about 2 cm.
- 4. The prepared gel should be used on the same day and should not be stored at 4°C for later use.
- 5. The stacker B may produce flocculent precipitation after being left still for a long time. Please gently shake it before use to mix it evenly.
- 6. There is monomer acrylamide in the premixed solution, which is harmful to the human body. Please pay attention to protective measures during operation.
- 7. To ensure that the sample enters the separating gel at the same time, when directly casting the stacker,

slowly and evenly add the prepared stacker.

8. After adding the modified coagulant, cast the gel as soon as possible and do not leave it for a long time.

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- 9. Temperature has a significant effect on the solidification time of the gel. To ensure the smooth progress of the experiment, the lower the temperature, the longer the solidification time, and the amount of improved coagulant should be appropriately increased. The higher the temperature, the faster the gel solidifies, and the amount of improved coagulant can be appropriately reduced.
- 10. If you need to further accelerate the gel speed, add an appropriate amount of TEMED before casting the gel and increase the amount of modified coagulant by 0.5 times as needed.
- 11. We also provide other colored (green, yellow, blue) stacker to distinguish different samples for gel electrophoresis.
- 12. For your safety and health, please wear laboratory clothes and disposable gloves during operation.



Servicebio[®] One-step Fastcast Colorful Acrylamide Kit

Product Description

This kit provides a simple and rapid preparation of one-step PAGE coloured gels, suitable for Tris-glycine electrophoresis system, can be used for SDS-PAGE gel electrophoresis and non-denaturing PAGE gel electrophoresis.

Compared with traditional acrylamide kits, there are the following advantages:

One-step cast, easy to use, fast and efficient: The kit is designed as a premixed solution for the stacking and resolving gel, which can cast gel by adding the modified coagulant. After casting the resolving gel, there is no need for liquid sealing to flatten the gel surface and wait for gelation, and the staking gel can be casted directly..

No need to add TEMED to avoid odours: No need to add TEMED during casting, thus avoid exposure to odourous and toxic reagents.

Colourful stacking gel with clear indications: The kit contains two stacking gel dyes (red/green) for the preparation of different coloured gels with clearly visible wells and for the differentiation of gels containing different samples. The colorful dye is stable in the stacking gel and does not migrate to the resolving gel with electrophoresis, thus not affecting the electrophoresis and staining effect. It is also easy to identify and excise the stacking gel after electrophoresis is completed, without affecting subsequent experiments such as Western Blot.

Excellent separation effect: protein bands after electrophoresis are flat, clear, delicate and sharp, especially for small molecule proteins.

The One-Step Fastcast Colorful Acrylamide Kits range consists of gel kits with different concentrations, including 6%, 8%, 10%, 12% and 15%, for the separation of proteins of different molecular weights. The kits are supplied with two colours of stacking gel dye and modified coagulant. Approximately 50 regular sized gels can be prepared, depending on the thickness and size of the gel. See below for a list of product numbers. This manual applies to the One-Step Fastcast Colorful Acrylamide Kit series (G2175, G2176, G2177, G2178, G2179).

Cat.No.	Concentration of gel	Quantity of gel that can be casted (approx.)
G2175	6%	
G2176	8%	
G2177	10%	60 pieces of 0.75 mm gel, or 50 pieces of 1.0 mm gel, or 30 pieces of 1.5 mm gel
G2178	12%	
G2179	15%	

• Product Number of this series

• List of kits

component name	Spec.
Stacker A	50 mL
Stacker B	50 mL
Resolver A	125 mL
Resolver B	125 mL
Polyacrylamide gel (PAGE) stacker red dye(500×)	100 μL
Polyacrylamide gel (PAGE) stacker green dye(500×)	100 μL
Modified coagulant	5×1 mL

Storage and Shipping Conditions

Ship with wet ice; Modified coagulant promoter store at -20 $^{\circ}$ C, other store at 2-8 $^{\circ}$ C away from light, valid for 12 months.

Assay Protocol

1. Choose appropriate concentration of acrylamide solution according to molecular weight of target protein:

Concentration of acrylamide	Best separation range (kDa) (Tris-Glycine Buffer,G2018)	Best separation range (kDa) (SWE Fast High-Resolution Electrophoresis Buffer, G2081)
6%	50-300	15-300
8%	30-130	10-250
10%	20-100	5-150
12%	10-60	3-100
15%	<40	<60

2. Follow the steps below to cast the gel. Note that the amount of reagents used in each step and the amount of gel volume required for different thicknesses of glass plates are shown in the table below.

- (1) Take equal volumes of Resolver A and Resolver B and mix well
- (2) Take equal volumes of Stacker A and Stacker B, then accurately aspirate the Polyacrylamide gel (PAGE) stacker dye, add to the gel solution and mix well. Note: The Polyacrylamide gel (PAGE) stacker dye is easy to settle, and should be mixed well before use. In addition, the stacker dye can also not be added, then the stacking gel is colourless.
- (3) Add the modified coagulant to the resolving gel mixture solution of (1) and mix gently. Inject the mixed gel solution into the assembled handcast glass plate so that the distance between the liquid surface and the upper edge of the concave glass plate is 0.5 cm longer than the length of the comb teeth. Note: When mixing after adding the modified coagulant, the action should be gentle to prevent a large number of air bubbles produced by violent mixing. The volume of the resolving gel solution already contains the appropriate amount of redundancy, please do not use all for casting the resolving gel, in order to avoid the stacking gel height is not enough.
- (4) Add the modified coagulant to the stacking gel mixture solution of (2) and mix gently. Without waiting for the resolving gel to solidify, the mixed stacking gel solution is directly injected into the handcast

glass plate, and then insert the comb teeth. Note: When mixing after adding the modified coagulant, the action should be gentle to prevent a large number of air bubbles produced by violent mixing. And try to be as gentle as possible when injecting the stacking gel, to avoid rushing the stacking gel solution into the resolving gel.

(5) After about 10-15 min, the gel is solidified, and the electrophoresis can be carried out after removing the teeth of the comb. Note: It is normal for the stacking and resolving gel to be slightly uneven at the demarcation line after gel solidification, which will not affect the subsequent electrophoresis. The volume of the stacking and resolving gel solutions can be adjusted proportionally for glass plates of different sizes and thicknesses. Taking the commonly used 8.3 cm x 7.3 cm gel plate as an example, the recommended preparation system is shown in the following table:

Preparation	Component	0.75 mm Glass	1.0 mm Glass	1.5 mm Glass
group	component	Plates	Plates	Plates
resolving gel solution	Stacker A	2 mL	2.5 mL	4 mL
	Stacker B	2 mL	2.5 mL	4 mL
	Modified coagulant	24 µL	30 µL	48 μL
stacking gel solution	Resolver A	1 mL	1 mL	1.5 mL
	Resolver B	1 mL	1 mL	1.5 mL
	Modified coagulant	12 µL	12 µL	18 µL
	Stacker dye (red or green)	4 μL	4 μL	6 µL

3. Recommended electrophoresis conditions:

- a) Electrophoresis with SWE Rapid High Resolution Electrophoresis Buffer (G2081): 150-250 V, 25-50 min;
- b) Or use Tris-Glycine electrophoresis buffer (G2018) for electrophoresis: stacking gel 90 V for about 30 min (marker goes into resolving gel); resolving gel 150-180 V for about 60-90 min (can be adjusted accordingly).

- When casting the stacking gel needs to be gently and left-right panning, to avoid focusing on a
 position to cast, so as to avoid the stacking gel solution into the resolving gel to destroy the flatness of
 the stacking and resolving gel demarcation line, casting the stacking gel need to use a 1mL pipette, do
 not pour vertically, to minimize the impact force.
- 2. The Polyacrylamide gel (PAGE) stacker dye (green or red) is easy to settle, so please blow lightly to mix before use.
- 3. If the temperature of the prepared Stacker/Resolver premix is low (just taken out of the refrigerator), please return it to room temperature before proceeding with the subsequent operations, to avoid prolonged gelation time due to its low temperature.
- 4. If the casted gel cannot be used on the same day, it can be stored at 4°C for 1-2 days.
- 5. Modified coagulant is more stable than ammonium persulphate (AP), for routine use, it can store at 4°C for six months; if not used for a long time, please place at -20 °C to avoid repeated freezing and thawing.
- 6. The presence of acrylamide in the premixed liquid is harmful to human, please pay attention to protective measures during operation.
- 7. Cast the gel as soon as possible after adding the modified coagulant, do not leave it for a long time.
- 8. There is a significant positive correlation between gelation speed and temperature. Under the same



conditions, the higher the temperature, the faster the gelation speed, room temperature is too high, it is recommended to reduce the amount of modified coagulant promoter; on the contrary, if the room temperature is low, it can be appropriate to extend the gelation time.

- 9. If you need to accelerate the speed of gelation, you can add the appropriate amount of TEMED before casting, and at the same time increase the amount of modified coagulant by 0.5 times.
- 10. For your safety and health, please wear a lab coat and disposable gloves.



Servicebio[®] One-step Fastcast Colorful Acrylamide Kit

Product Description

This kit provides a simple and rapid preparation of one-step PAGE coloured gels, suitable for Tris-glycine electrophoresis system, can be used for SDS-PAGE gel electrophoresis and non-denaturing PAGE gel electrophoresis.

Compared with traditional acrylamide kits, there are the following advantages:

One-step cast, easy to use, fast and efficient: The kit is designed as a premixed solution for the stacking and resolving gel, which can cast gel by adding the modified coagulant. After casting the resolving gel, there is no need for liquid sealing to flatten the gel surface and wait for gelation, and the staking gel can be casted directly..

No need to add TEMED to avoid odours: No need to add TEMED during casting, thus avoid exposure to odourous and toxic reagents.

Colourful stacking gel with clear indications: The kit contains two stacking gel dyes (red/green) for the preparation of different coloured gels with clearly visible wells and for the differentiation of gels containing different samples. The colorful dye is stable in the stacking gel and does not migrate to the resolving gel with electrophoresis, thus not affecting the electrophoresis and staining effect. It is also easy to identify and excise the stacking gel after electrophoresis is completed, without affecting subsequent experiments such as Western Blot.

Excellent separation effect: protein bands after electrophoresis are flat, clear, delicate and sharp, especially for small molecule proteins.

The One-Step Fastcast Colorful Acrylamide Kits range consists of gel kits with different concentrations, including 6%, 8%, 10%, 12% and 15%, for the separation of proteins of different molecular weights. The kits are supplied with two colours of stacking gel dye and modified coagulant. Approximately 50 regular sized gels can be prepared, depending on the thickness and size of the gel. See below for a list of product numbers. This manual applies to the One-Step Fastcast Colorful Acrylamide Kit series (G2175, G2176, G2177, G2178, G2179).

Cat.No.	Concentration of gel	Quantity of gel that can be casted (approx.)
G2175	6%	
G2176	8%	
G2177	10%	60 pieces of 0.75 mm gel, or 50 pieces of 1.0 mm gel, or 30 pieces of 1.5 mm gel
G2178	12%	
G2179	15%	

• Product Number of this series

• List of kits

component name	Spec.
Stacker A	50 mL
Stacker B	50 mL
Resolver A	125 mL
Resolver B	125 mL
Polyacrylamide gel (PAGE) stacker red dye(500×)	100 μL
Polyacrylamide gel (PAGE) stacker green dye(500×)	100 μL
Modified coagulant	5×1 mL

Storage and Shipping Conditions

Ship with wet ice; Modified coagulant promoter store at -20 $^{\circ}$ C, other store at 2-8 $^{\circ}$ C away from light, valid for 12 months.

Assay Protocol

1. Choose appropriate concentration of acrylamide solution according to molecular weight of target protein:

Concentration of acrylamide	Best separation range (kDa) (Tris-Glycine Buffer,G2018)	Best separation range (kDa) (SWE Fast High-Resolution Electrophoresis Buffer, G2081)
6%	50-300	15-300
8%	30-130	10-250
10%	20-100	5-150
12%	10-60	3-100
15%	<40	<60

2. Follow the steps below to cast the gel. Note that the amount of reagents used in each step and the amount of gel volume required for different thicknesses of glass plates are shown in the table below.

- (1) Take equal volumes of Resolver A and Resolver B and mix well
- (2) Take equal volumes of Stacker A and Stacker B, then accurately aspirate the Polyacrylamide gel (PAGE) stacker dye, add to the gel solution and mix well. Note: The Polyacrylamide gel (PAGE) stacker dye is easy to settle, and should be mixed well before use. In addition, the stacker dye can also not be added, then the stacking gel is colourless.
- (3) Add the modified coagulant to the resolving gel mixture solution of (1) and mix gently. Inject the mixed gel solution into the assembled handcast glass plate so that the distance between the liquid surface and the upper edge of the concave glass plate is 0.5 cm longer than the length of the comb teeth. Note: When mixing after adding the modified coagulant, the action should be gentle to prevent a large number of air bubbles produced by violent mixing. The volume of the resolving gel solution already contains the appropriate amount of redundancy, please do not use all for casting the resolving gel, in order to avoid the stacking gel height is not enough.
- (4) Add the modified coagulant to the stacking gel mixture solution of (2) and mix gently. Without waiting for the resolving gel to solidify, the mixed stacking gel solution is directly injected into the handcast

glass plate, and then insert the comb teeth. Note: When mixing after adding the modified coagulant, the action should be gentle to prevent a large number of air bubbles produced by violent mixing. And try to be as gentle as possible when injecting the stacking gel, to avoid rushing the stacking gel solution into the resolving gel.

(5) After about 10-15 min, the gel is solidified, and the electrophoresis can be carried out after removing the teeth of the comb. Note: It is normal for the stacking and resolving gel to be slightly uneven at the demarcation line after gel solidification, which will not affect the subsequent electrophoresis. The volume of the stacking and resolving gel solutions can be adjusted proportionally for glass plates of different sizes and thicknesses. Taking the commonly used 8.3 cm x 7.3 cm gel plate as an example, the recommended preparation system is shown in the following table:

Preparation	Component	0.75 mm Glass	1.0 mm Glass	1.5 mm Glass
group	component	Plates	Plates	Plates
resolving gel solution	Stacker A	2 mL	2.5 mL	4 mL
	Stacker B	2 mL	2.5 mL	4 mL
	Modified coagulant	24 µL	30 µL	48 μL
stacking gel solution	Resolver A	1 mL	1 mL	1.5 mL
	Resolver B	1 mL	1 mL	1.5 mL
	Modified coagulant	12 µL	12 µL	18 µL
	Stacker dye (red or green)	4 μL	4 μL	6 µL

3. Recommended electrophoresis conditions:

- a) Electrophoresis with SWE Rapid High Resolution Electrophoresis Buffer (G2081): 150-250 V, 25-50 min;
- b) Or use Tris-Glycine electrophoresis buffer (G2018) for electrophoresis: stacking gel 90 V for about 30 min (marker goes into resolving gel); resolving gel 150-180 V for about 60-90 min (can be adjusted accordingly).

- When casting the stacking gel needs to be gently and left-right panning, to avoid focusing on a
 position to cast, so as to avoid the stacking gel solution into the resolving gel to destroy the flatness of
 the stacking and resolving gel demarcation line, casting the stacking gel need to use a 1mL pipette, do
 not pour vertically, to minimize the impact force.
- 2. The Polyacrylamide gel (PAGE) stacker dye (green or red) is easy to settle, so please blow lightly to mix before use.
- 3. If the temperature of the prepared Stacker/Resolver premix is low (just taken out of the refrigerator), please return it to room temperature before proceeding with the subsequent operations, to avoid prolonged gelation time due to its low temperature.
- 4. If the casted gel cannot be used on the same day, it can be stored at 4°C for 1-2 days.
- 5. Modified coagulant is more stable than ammonium persulphate (AP), for routine use, it can store at 4°C for six months; if not used for a long time, please place at -20 °C to avoid repeated freezing and thawing.
- 6. The presence of acrylamide in the premixed liquid is harmful to human, please pay attention to protective measures during operation.
- 7. Cast the gel as soon as possible after adding the modified coagulant, do not leave it for a long time.
- 8. There is a significant positive correlation between gelation speed and temperature. Under the same



conditions, the higher the temperature, the faster the gelation speed, room temperature is too high, it is recommended to reduce the amount of modified coagulant promoter; on the contrary, if the room temperature is low, it can be appropriate to extend the gelation time.

- 9. If you need to accelerate the speed of gelation, you can add the appropriate amount of TEMED before casting, and at the same time increase the amount of modified coagulant by 0.5 times.
- 10. For your safety and health, please wear a lab coat and disposable gloves.



Servicebio[®] One-step Fastcast Colorful Acrylamide Kit

Product Description

This kit provides a simple and rapid preparation of one-step PAGE coloured gels, suitable for Tris-glycine electrophoresis system, can be used for SDS-PAGE gel electrophoresis and non-denaturing PAGE gel electrophoresis.

Compared with traditional acrylamide kits, there are the following advantages:

One-step cast, easy to use, fast and efficient: The kit is designed as a premixed solution for the stacking and resolving gel, which can cast gel by adding the modified coagulant. After casting the resolving gel, there is no need for liquid sealing to flatten the gel surface and wait for gelation, and the staking gel can be casted directly..

No need to add TEMED to avoid odours: No need to add TEMED during casting, thus avoid exposure to odourous and toxic reagents.

Colourful stacking gel with clear indications: The kit contains two stacking gel dyes (red/green) for the preparation of different coloured gels with clearly visible wells and for the differentiation of gels containing different samples. The colorful dye is stable in the stacking gel and does not migrate to the resolving gel with electrophoresis, thus not affecting the electrophoresis and staining effect. It is also easy to identify and excise the stacking gel after electrophoresis is completed, without affecting subsequent experiments such as Western Blot.

Excellent separation effect: protein bands after electrophoresis are flat, clear, delicate and sharp, especially for small molecule proteins.

The One-Step Fastcast Colorful Acrylamide Kits range consists of gel kits with different concentrations, including 6%, 8%, 10%, 12% and 15%, for the separation of proteins of different molecular weights. The kits are supplied with two colours of stacking gel dye and modified coagulant. Approximately 50 regular sized gels can be prepared, depending on the thickness and size of the gel. See below for a list of product numbers. This manual applies to the One-Step Fastcast Colorful Acrylamide Kit series (G2175, G2176, G2177, G2178, G2179).

Cat.No.	Concentration of gel	Quantity of gel that can be casted (approx.)
G2175	6%	
G2176	8%	60 pieces of 0.75 mm gel, or 50 pieces of 1.0 mm gel, or pieces of 1.5 mm gel
G2177	10%	
G2178	12%	
G2179	15%	

• Product Number of this series

• List of kits

component name	Spec.
Stacker A	50 mL
Stacker B	50 mL
Resolver A	125 mL
Resolver B	125 mL
Polyacrylamide gel (PAGE) stacker red dye(500×)	100 μL
Polyacrylamide gel (PAGE) stacker green dye(500×)	100 μL
Modified coagulant	5×1 mL

Storage and Shipping Conditions

Ship with wet ice; Modified coagulant promoter store at -20 $^{\circ}$ C, other store at 2-8 $^{\circ}$ C away from light, valid for 12 months.

Assay Protocol

1. Choose appropriate concentration of acrylamide solution according to molecular weight of target protein:

Concentration of acrylamide	Best separation range (kDa) (Tris-Glycine Buffer,G2018)	Best separation range (kDa) (SWE Fast High-Resolution Electrophoresis Buffer, G2081)
6%	50-300	15-300
8%	30-130	10-250
10%	20-100	5-150
12%	10-60	3-100
15%	<40	<60

2. Follow the steps below to cast the gel. Note that the amount of reagents used in each step and the amount of gel volume required for different thicknesses of glass plates are shown in the table below.

- (1) Take equal volumes of Resolver A and Resolver B and mix well
- (2) Take equal volumes of Stacker A and Stacker B, then accurately aspirate the Polyacrylamide gel (PAGE) stacker dye, add to the gel solution and mix well. Note: The Polyacrylamide gel (PAGE) stacker dye is easy to settle, and should be mixed well before use. In addition, the stacker dye can also not be added, then the stacking gel is colourless.
- (3) Add the modified coagulant to the resolving gel mixture solution of (1) and mix gently. Inject the mixed gel solution into the assembled handcast glass plate so that the distance between the liquid surface and the upper edge of the concave glass plate is 0.5 cm longer than the length of the comb teeth. Note: When mixing after adding the modified coagulant, the action should be gentle to prevent a large number of air bubbles produced by violent mixing. The volume of the resolving gel solution already contains the appropriate amount of redundancy, please do not use all for casting the resolving gel, in order to avoid the stacking gel height is not enough.
- (4) Add the modified coagulant to the stacking gel mixture solution of (2) and mix gently. Without waiting for the resolving gel to solidify, the mixed stacking gel solution is directly injected into the handcast
glass plate, and then insert the comb teeth. Note: When mixing after adding the modified coagulant, the action should be gentle to prevent a large number of air bubbles produced by violent mixing. And try to be as gentle as possible when injecting the stacking gel, to avoid rushing the stacking gel solution into the resolving gel.

(5) After about 10-15 min, the gel is solidified, and the electrophoresis can be carried out after removing the teeth of the comb. Note: It is normal for the stacking and resolving gel to be slightly uneven at the demarcation line after gel solidification, which will not affect the subsequent electrophoresis. The volume of the stacking and resolving gel solutions can be adjusted proportionally for glass plates of different sizes and thicknesses. Taking the commonly used 8.3 cm x 7.3 cm gel plate as an example, the recommended preparation system is shown in the following table:

Preparation	Component	0.75 mm Glass	1.0 mm Glass	1.5 mm Glass	
group	component	Plates	Plates	Plates	
resolving gel solution	Stacker A	2 mL	2.5 mL	4 mL	
	Stacker B	2 mL	2.5 mL	4 mL	
	Modified coagulant	24 µL	30 µL	48 μL	
stacking gel solution	Resolver A	1 mL	1 mL	1.5 mL	
	Resolver B	1 mL	1 mL	1.5 mL	
	Modified coagulant	12 µL	12 µL	18 µL	
	Stacker dye (red or green)	4 μL	4 μL	6 µL	

3. Recommended electrophoresis conditions:

- a) Electrophoresis with SWE Rapid High Resolution Electrophoresis Buffer (G2081): 150-250 V, 25-50 min;
- b) Or use Tris-Glycine electrophoresis buffer (G2018) for electrophoresis: stacking gel 90 V for about 30 min (marker goes into resolving gel); resolving gel 150-180 V for about 60-90 min (can be adjusted accordingly).

- When casting the stacking gel needs to be gently and left-right panning, to avoid focusing on a
 position to cast, so as to avoid the stacking gel solution into the resolving gel to destroy the flatness of
 the stacking and resolving gel demarcation line, casting the stacking gel need to use a 1mL pipette, do
 not pour vertically, to minimize the impact force.
- 2. The Polyacrylamide gel (PAGE) stacker dye (green or red) is easy to settle, so please blow lightly to mix before use.
- 3. If the temperature of the prepared Stacker/Resolver premix is low (just taken out of the refrigerator), please return it to room temperature before proceeding with the subsequent operations, to avoid prolonged gelation time due to its low temperature.
- 4. If the casted gel cannot be used on the same day, it can be stored at 4°C for 1-2 days.
- 5. Modified coagulant is more stable than ammonium persulphate (AP), for routine use, it can store at 4°C for six months; if not used for a long time, please place at -20 °C to avoid repeated freezing and thawing.
- 6. The presence of acrylamide in the premixed liquid is harmful to human, please pay attention to protective measures during operation.
- 7. Cast the gel as soon as possible after adding the modified coagulant, do not leave it for a long time.
- 8. There is a significant positive correlation between gelation speed and temperature. Under the same



conditions, the higher the temperature, the faster the gelation speed, room temperature is too high, it is recommended to reduce the amount of modified coagulant promoter; on the contrary, if the room temperature is low, it can be appropriate to extend the gelation time.

- 9. If you need to accelerate the speed of gelation, you can add the appropriate amount of TEMED before casting, and at the same time increase the amount of modified coagulant by 0.5 times.
- 10. For your safety and health, please wear a lab coat and disposable gloves.



Servicebio[®] One-step Fastcast Colorful Acrylamide Kit

Product Description

This kit provides a simple and rapid preparation of one-step PAGE coloured gels, suitable for Tris-glycine electrophoresis system, can be used for SDS-PAGE gel electrophoresis and non-denaturing PAGE gel electrophoresis.

Compared with traditional acrylamide kits, there are the following advantages:

One-step cast, easy to use, fast and efficient: The kit is designed as a premixed solution for the stacking and resolving gel, which can cast gel by adding the modified coagulant. After casting the resolving gel, there is no need for liquid sealing to flatten the gel surface and wait for gelation, and the staking gel can be casted directly..

No need to add TEMED to avoid odours: No need to add TEMED during casting, thus avoid exposure to odourous and toxic reagents.

Colourful stacking gel with clear indications: The kit contains two stacking gel dyes (red/green) for the preparation of different coloured gels with clearly visible wells and for the differentiation of gels containing different samples. The colorful dye is stable in the stacking gel and does not migrate to the resolving gel with electrophoresis, thus not affecting the electrophoresis and staining effect. It is also easy to identify and excise the stacking gel after electrophoresis is completed, without affecting subsequent experiments such as Western Blot.

Excellent separation effect: protein bands after electrophoresis are flat, clear, delicate and sharp, especially for small molecule proteins.

The One-Step Fastcast Colorful Acrylamide Kits range consists of gel kits with different concentrations, including 6%, 8%, 10%, 12% and 15%, for the separation of proteins of different molecular weights. The kits are supplied with two colours of stacking gel dye and modified coagulant. Approximately 50 regular sized gels can be prepared, depending on the thickness and size of the gel. See below for a list of product numbers. This manual applies to the One-Step Fastcast Colorful Acrylamide Kit series (G2175, G2176, G2177, G2178, G2179)..

Cat.No.	Concentration of gel	Quantity of gel that can be casted (approx.)
G2175	6%	
G2176	8%	
G2177	10%	60 pieces of 0.75 mm gel, or 50 pieces of 1.0 mm gel, or 30 pieces of 1.5 mm gel
G2178	12%	
G2179	15%	

• Product Number of this series

• List of kits

component name	Spec.
Stacker A	50 mL
Stacker B	50 mL
Resolver A	125 mL
Resolver B	125 mL
Polyacrylamide gel (PAGE) stacker red dye(500×)	100 μL
Polyacrylamide gel (PAGE) stacker green dye(500×)	100 μL
Modified coagulant	5×1 mL

Storage and Shipping Conditions

Ship with wet ice; Modified coagulant promoter store at -20 $^{\circ}$ C, other store at 2-8 $^{\circ}$ C away from light, valid for 12 months.

Assay Protocol

1. Choose appropriate concentration of acrylamide solution according to molecular weight of target protein:

Concentration of acrylamide	Best separation range (kDa) (Tris-Glycine Buffer,G2018)	Best separation range (kDa) (SWE Fast High-Resolution Electrophoresis Buffer, G2081)
6%	50-300	15-300
8%	30-130	10-250
10%	20-100	5-150
12%	10-60	3-100
15%	<40	<60

2. Follow the steps below to cast the gel. Note that the amount of reagents used in each step and the amount of gel volume required for different thicknesses of glass plates are shown in the table below.

- (1) Take equal volumes of Resolver A and Resolver B and mix well
- (2) Take equal volumes of Stacker A and Stacker B, then accurately aspirate the Polyacrylamide gel (PAGE) stacker dye, add to the gel solution and mix well. Note: The Polyacrylamide gel (PAGE) stacker dye is easy to settle, and should be mixed well before use. In addition, the stacker dye can also not be added, then the stacking gel is colourless.
- (3) Add the modified coagulant to the resolving gel mixture solution of (1) and mix gently. Inject the mixed gel solution into the assembled handcast glass plate so that the distance between the liquid surface and the upper edge of the concave glass plate is 0.5 cm longer than the length of the comb teeth. Note: When mixing after adding the modified coagulant, the action should be gentle to prevent a large number of air bubbles produced by violent mixing. The volume of the resolving gel solution already contains the appropriate amount of redundancy, please do not use all for casting the resolving gel, in order to avoid the stacking gel height is not enough.
- (4) Add the modified coagulant to the stacking gel mixture solution of (2) and mix gently. Without waiting for the resolving gel to solidify, the mixed stacking gel solution is directly injected into the handcast

glass plate, and then insert the comb teeth. Note: When mixing after adding the modified coagulant, the action should be gentle to prevent a large number of air bubbles produced by violent mixing. And try to be as gentle as possible when injecting the stacking gel, to avoid rushing the stacking gel solution into the resolving gel.

(5) After about 10-15 min, the gel is solidified, and the electrophoresis can be carried out after removing the teeth of the comb. Note: It is normal for the stacking and resolving gel to be slightly uneven at the demarcation line after gel solidification, which will not affect the subsequent electrophoresis. The volume of the stacking and resolving gel solutions can be adjusted proportionally for glass plates of different sizes and thicknesses. Taking the commonly used 8.3 cm x 7.3 cm gel plate as an example, the recommended preparation system is shown in the following table:

Preparation	Component	0.75 mm Glass	1.0 mm Glass	1.5 mm Glass	
group	component	Plates	Plates	Plates	
resolving gel solution	Stacker A	2 mL	2.5 mL	4 mL	
	Stacker B	2 mL	2.5 mL	4 mL	
	Modified coagulant	24 µL	30 µL	48 μL	
stacking gel solution	Resolver A	1 mL	1 mL	1.5 mL	
	Resolver B	1 mL	1 mL	1.5 mL	
	Modified coagulant	12 µL	12 µL	18 µL	
	Stacker dye (red or green)	4 μL	4 μL	6 µL	

3. Recommended electrophoresis conditions:

- a) Electrophoresis with SWE Rapid High Resolution Electrophoresis Buffer (G2081): 150-250 V, 25-50 min;
- b) Or use Tris-Glycine electrophoresis buffer (G2018) for electrophoresis: stacking gel 90 V for about 30 min (marker goes into resolving gel); resolving gel 150-180 V for about 60-90 min (can be adjusted accordingly).

- When casting the stacking gel needs to be gently and left-right panning, to avoid focusing on a
 position to cast, so as to avoid the stacking gel solution into the resolving gel to destroy the flatness of
 the stacking and resolving gel demarcation line, casting the stacking gel need to use a 1mL pipette, do
 not pour vertically, to minimize the impact force.
- 2. The Polyacrylamide gel (PAGE) stacker dye (green or red) is easy to settle, so please blow lightly to mix before use.
- 3. If the temperature of the prepared Stacker/Resolver premix is low (just taken out of the refrigerator), please return it to room temperature before proceeding with the subsequent operations, to avoid prolonged gelation time due to its low temperature.
- 4. If the casted gel cannot be used on the same day, it can be stored at 4°C for 1-2 days.
- 5. Modified coagulant is more stable than ammonium persulphate (AP), for routine use, it can store at 4°C for six months; if not used for a long time, please place at -20 °C to avoid repeated freezing and thawing.
- 6. The presence of acrylamide in the premixed liquid is harmful to human, please pay attention to protective measures during operation.
- 7. Cast the gel as soon as possible after adding the modified coagulant, do not leave it for a long time.
- 8. There is a significant positive correlation between gelation speed and temperature. Under the same



conditions, the higher the temperature, the faster the gelation speed, room temperature is too high, it is recommended to reduce the amount of modified coagulant promoter; on the contrary, if the room temperature is low, it can be appropriate to extend the gelation time.

- 9. If you need to accelerate the speed of gelation, you can add the appropriate amount of TEMED before casting, and at the same time increase the amount of modified coagulant by 0.5 times.
- 10. For your safety and health, please wear a lab coat and disposable gloves.



Servicebio® 30% Acrylamide-Bisacrylamide (29:1)

Cat #: G2004

Product Information

Product Name	Cat. No.	Spec.
20% Applomide Risson Jamide (20:1)	G2004-100ML	100 mL
SUM ACTYIAITIIQE-DISACTYIAITIIQE (29.1)	G2004-500ML	500 mL

Product Description/Introduction

30% acrylamide (29:1) is an aqueous solution containing 30% acrylamide, with a ratio of acrylamide to methyl-diacrylamide is 29:1. It is commonly used for the preparation of PAGE gels and SDS-PAGE gels for the separation of protein or nucleic acid, and is a common stock solution used in molecular biology laboratories for gel preparation.

Product Components

Component	G2004-100ML	G2004-500ML
30% Acrylamide-Bisacrylamide (29:1)	100 mL	500 mL
Manual	1 բ	oc

Storage and Shipping Conditions

Ship with wet ice; Store at 2-8°C away from light, valid for 12 months.

Assay Protocol/Procedures

1. For the selection of protein molecular weight and gel concentration, please refer to the following table:

Protein molecular weight range (kDA)	Suitable gel concentration (%)
< 10	15-20
10-40	12-15
40-100	10-12
100-500	5-10

2. According to the molecular weight of the target protein, the concentration of the separation gel can be selected and prepared according to the following table:

Separation gel concentrations (%)	8%	10%	12%	15%	18%	20%
H ₂ O /mL	4.63	3.97	3.3	2.3	1.3	0.63
30% Acr-Bis (29:1) /mL	2.67	3.33	4.0	5.0	6.0	6.67
1.5M Tris-HCI (pH 8.8) /mL	2.5	2.5	2.5	2.5	2.5	2.5



10%SDS /µL	100	100	100	100	100	100
AP (Ammonium Persulfate) /μL	100	100	100	100	100	100
TEMED/µL	5	5	5	5	5	5
Total volume * / mL			1	0		

 \star The total volume does not include the TEMED volume.

3. The preparation of stacking gel can refer to the following table:

Stacking gel concentration (%)	5%			
H ₂ O /mL	1.93	2.89	3.86	5.79
30% Acr-Bis (29:1) /mL	0.5	0.75	1.0	1.5
1.0M Tris-HCl (pH 6.8) /mL	0.5	0.75	1.0	1.5
10%SDS /µL	40	60	80	120
AP (Ammonium Persulfate) /μL	30	45	60	90
TEMED/µL	4	6	8	12
Total volume * / mL	3	4.5	6	9

* The total volume does not include the TEMED volume.

- 1. This product has certain toxicity, please pay attention to protection when use.
- 2. Temperature has an effect on the solidification time of gels. Generally, the lower the temperature, the longer the solidification time; the higher the temperature the faster the gel.
- 3. The gel needs sufficient solidification time, and it is recommended that the gel be fully prepared and left to ensure that the it gels thoroughly.
- 4. If you need a full set of reagents, you can buy other products of our company, such as SDS-PAGE gel preparation kit (G2003/G2037), or super-fast color gel preparation kit series (G2041 / G2042 / G2043 G2044 / G2045 / G2060 / G2061 / G2062 / G2063 / G2064), and high resolution ultra-fast color gel preparation kit series (G2066/G2067/G2068, G2071/G2072/G2073), can meet different experimental needs.
- 5. For your safety and health, please wear safety glasses, gloves, or protective clothing.



Servicebio® 30% Acrylamide-Bisacrylamide (29:1)

Cat #: G2004

Product Information

Product Name	Cat. No.	Spec.
20% Applomide Risson Jamide (20:1)	G2004-100ML	100 mL
SUM ACTYIAITIIQE-DISACTYIAITIIQE (29.1)	G2004-500ML	500 mL

Product Description/Introduction

30% acrylamide (29:1) is an aqueous solution containing 30% acrylamide, with a ratio of acrylamide to methyl-diacrylamide is 29:1. It is commonly used for the preparation of PAGE gels and SDS-PAGE gels for the separation of protein or nucleic acid, and is a common stock solution used in molecular biology laboratories for gel preparation.

Product Components

Component	G2004-100ML	G2004-500ML
30% Acrylamide-Bisacrylamide (29:1)	100 mL	500 mL
Manual	1 pc	

Storage and Shipping Conditions

Ship with wet ice; Store at 2-8°C away from light, valid for 12 months.

Assay Protocol/Procedures

1. For the selection of protein molecular weight and gel concentration, please refer to the following table:

Protein molecular weight range (kDA)	Suitable gel concentration (%)
< 10	15-20
10-40	12-15
40-100	10-12
100-500	5-10

2. According to the molecular weight of the target protein, the concentration of the separation gel can be selected and prepared according to the following table:

Separation gel concentrations (%)	8%	10%	12%	15%	18%	20%
H ₂ O /mL	4.63	3.97	3.3	2.3	1.3	0.63
30% Acr-Bis (29:1) /mL	2.67	3.33	4.0	5.0	6.0	6.67
1.5M Tris-HCI (pH 8.8) /mL	2.5	2.5	2.5	2.5	2.5	2.5



10%SDS /µL	100	100	100	100	100	100
AP (Ammonium Persulfate) /μL	100	100	100	100	100	100
TEMED/µL	5	5	5	5	5	5
Total volume * / mL	10					

 \star The total volume does not include the TEMED volume.

3. The preparation of stacking gel can refer to the following table:

Stacking gel concentration (%)	5%			
H ₂ O /mL	1.93	2.89	3.86	5.79
30% Acr-Bis (29:1) /mL	0.5	0.75	1.0	1.5
1.0M Tris-HCl (pH 6.8) /mL	0.5	0.75	1.0	1.5
10%SDS /µL	40	60	80	120
AP (Ammonium Persulfate) /μL	30	45	60	90
TEMED/µL	4	6	8	12
Total volume * / mL	3	4.5	6	9

* The total volume does not include the TEMED volume.

- 1. This product has certain toxicity, please pay attention to protection when use.
- 2. Temperature has an effect on the solidification time of gels. Generally, the lower the temperature, the longer the solidification time; the higher the temperature the faster the gel.
- 3. The gel needs sufficient solidification time, and it is recommended that the gel be fully prepared and left to ensure that the it gels thoroughly.
- 4. If you need a full set of reagents, you can buy other products of our company, such as SDS-PAGE gel preparation kit (G2003/G2037), or super-fast color gel preparation kit series (G2041 / G2042 / G2043 G2044 / G2045 / G2060 / G2061 / G2062 / G2063 / G2064), and high resolution ultra-fast color gel preparation kit series (G2066/G2067/G2068, G2071/G2072/G2073), can meet different experimental needs.
- 5. For your safety and health, please wear safety glasses, gloves, or protective clothing.



Servicebio® 40% Acrylamide-Bisacrylamide (37.5:1)

Cat #: G2005

Product Information

Product Name	Cat. No.	Spec.
40% Applementes Disson Jamida (27 E.1)	G2005-100ML	100 mL
	G2005-500ML	500 mL

Product Description/Introduction

40% acrylamide (37.5:1) is an aqueous solution containing 40% acrylamide, with a ratio of acrylamide and methyl-diacrylamide is 37.5:1. It is commonly used for the preparation preparation of PAGE gels and SDS-PAGE gels for the separation of protein or nucleic acid, and is a common stock solution used in molecular biology laboratories for gel preparation.

Production components

Component	G2005-100ML	G2005-500ML
40% Acrylamide-Bisacrylamide (37.5:1)	100 mL	500 mL
Manual	1 pc	

Storage and Shipping Conditions

Ship with wet ice; Store at 2-8°C away from light, valid for 12 months.

Assay Protocol/Procedures

1. For the selection of protein molecular weight and gel concentration, please refer to the following table:

Protein molecular weight range (kDA)	Suitable gel concentration (%)
< 10	15-20
10-40	12-15
40-100	10-12
100-500	5-10

2. According to the molecular weight of the target protein, the concentration of the separation gel can be selected and prepared according to the following table:

Separation gel concentrations (%)	8%	10%	12%	15%	18%	20%
H ₂ O /mL	5.3	4.8	4.3	3.55	2.8	2.3
40% Acr-Bis (37.5:1) /mL	2.0	2.5	3.0	3.75	4.5	5.0
1.5M Tris-HCI (pH 8.8) /mL	2.5	2.5	2.5	2.5	2.5	2.5



10%SDS /µL	100	100	100	100	100	100
AP (Ammonium Persulfate) /μL	100	100	100	100	100	100
TEMED/µL	5	5	5	5	5	5
Total volume * / mL	10					

 \star The total volume does not include the TEMED volume.

3. The preparation of stacking gel can refer to the following table:

Stacking gel concentration (%)	5%			
H ₂ O /mL	2.06	3.07	4.11	6.16
40% Acr-Bis (37.5:1) /mL	0.375	0.56	0.75	1.125
1.0M Tris-HCI (pH 6.8) /mL	0.5	0.75	1.0	1.5
10%SDS /µL	40	60	80	120
AP (Ammonium Persulfate) /μL	30	45	60	90
TEMED/µL	4	6	8	12
Total volume * / mL	3	4.5	6	9

* The total volume does not include the TEMED volume.

- 1. This product has certain toxicity, please pay attention to protection when use.
- 2. Temperature will have an effect on the solidification time of gels. Generally, the lower the temperature, the longer the solidification time; the higher the temperature the faster the gel.
- 3. The gel needs sufficient solidification time, and it is recommended that the gel be fully prepared and left to ensure that the it gels thoroughly.
- 4. If you need a full set of reagents, you can buy other products of our company, such as SDS-PAGE gel preparation kit (G2003/G2037), or super-fast color gel preparation kit series (G2041 / G2042 / G2043 G2044 / G2045 / G2060 / G2061 / G2062 / G2063 / G2064), and high resolution ultra-fast color gel preparation kit series (G2066/G2067/G2068, G2071/G2072/G2073), can meet different experimental needs.
- 5. For your safety and health, please wear safety glasses, gloves, or protective clothing.



Servicebio® 40% Acrylamide-Bisacrylamide (37.5:1)

Cat #: G2005

Product Information

Product Name	Cat. No.	Spec.
40% Applementes Disson Jamida (27 E.1)	G2005-100ML	100 mL
40% Acrylamice-Bisacrylamice (37.5:1)	G2005-500ML	500 mL

Product Description/Introduction

40% acrylamide (37.5:1) is an aqueous solution containing 40% acrylamide, with a ratio of acrylamide and methyl-diacrylamide is 37.5:1. It is commonly used for the preparation preparation of PAGE gels and SDS-PAGE gels for the separation of protein or nucleic acid, and is a common stock solution used in molecular biology laboratories for gel preparation.

Production components

Component	G2005-100ML	G2005-500ML
40% Acrylamide-Bisacrylamide (37.5:1)	100 mL	500 mL
Manual	1 г	DC

Storage and Shipping Conditions

Ship with wet ice; Store at 2-8°C away from light, valid for 12 months.

Assay Protocol/Procedures

1. For the selection of protein molecular weight and gel concentration, please refer to the following table:

Protein molecular weight range (kDA)	Suitable gel concentration (%)
< 10	15-20
10-40	12-15
40-100	10-12
100-500	5-10

2. According to the molecular weight of the target protein, the concentration of the separation gel can be selected and prepared according to the following table:

Separation gel concentrations (%)	8%	10%	12%	15%	18%	20%
H ₂ O /mL	5.3	4.8	4.3	3.55	2.8	2.3
40% Acr-Bis (37.5:1) /mL	2.0	2.5	3.0	3.75	4.5	5.0
1.5M Tris-HCI (pH 8.8) /mL	2.5	2.5	2.5	2.5	2.5	2.5



10%SDS /µL	100	100	100	100	100	100
AP (Ammonium Persulfate) /μL	100	100	100	100	100	100
TEMED/µL	5	5	5	5	5	5
Total volume * / mL			1	0		

 \star The total volume does not include the TEMED volume.

3. The preparation of stacking gel can refer to the following table:

Stacking gel concentration (%)		5	%	
H ₂ O /mL	2.06	3.07	4.11	6.16
40% Acr-Bis (37.5:1) /mL	0.375	0.56	0.75	1.125
1.0M Tris-HCI (pH 6.8) /mL	0.5	0.75	1.0	1.5
10%SDS /µL	40	60	80	120
AP (Ammonium Persulfate) /μL	30	45	60	90
TEMED/µL	4	6	8	12
Total volume * / mL	3	4.5	6	9

* The total volume does not include the TEMED volume.

- 1. This product has certain toxicity, please pay attention to protection when use.
- 2. Temperature will have an effect on the solidification time of gels. Generally, the lower the temperature, the longer the solidification time; the higher the temperature the faster the gel.
- 3. The gel needs sufficient solidification time, and it is recommended that the gel be fully prepared and left to ensure that the it gels thoroughly.
- 4. If you need a full set of reagents, you can buy other products of our company, such as SDS-PAGE gel preparation kit (G2003/G2037), or super-fast color gel preparation kit series (G2041 / G2042 / G2043 G2044 / G2045 / G2060 / G2061 / G2062 / G2063 / G2064), and high resolution ultra-fast color gel preparation kit series (G2066/G2067/G2068, G2071/G2072/G2073), can meet different experimental needs.
- 5. For your safety and health, please wear safety glasses, gloves, or protective clothing.



Servicebio® Red Dye for PAGE Stacking Gel, 500X

Cat #: G2046-500UL

Product Information

Product Name	Cat. No.	Spec.
Red Dye for PAGE Stacking Gel, 500X	G2046-500UL	500 μL

Product Description/Introduction

This product is a kind of dye suitable for preparation of red polyacrylamide gel upper gels, the dye can be stable in the upper gels (stacking gels), will not enter the lower gels (separation gels) with electrophoresis. Therefore, the addition of the red dye can make the upper gels protein spotting wells clear, and it is easy to judge the margin of the top sample wells or whether they are distorted or broken, and facilitates the accurate addition of protein samples into the spotting wells. The dye will not affect the electrophoresis and staining effect, after the electrophoresis is completed, it is also easy to identify and remove the upper gel, does not affect the subsequent Western Blot and other experiments, can be used with the company's G2003, G2037 products.

Storage and Shipping Conditions

Ship at room temperature; Store at 2-8°C or room temperature; Valid for 24 months.

Assay Protocol/Procedures

- 1. Due to the special nature of the dye, precipitation may occur during storage, so please mix upside down before use;
- 2. For a 1.0 mm gel, approximately 2 mL of upper gel solution is required to prepare a single gel, which can be added at a ratio of 2 µL of upper red dye (500 x) per 1 mL of upper gel solution and mixed well;
- 3. Add the upper gel polymerisation catalyst (such as ammonium persulphate or other ammonium persulphate substitutes) and TEMED, mix well and inject the upper gel solution between the gel plates using a pipette and insert into the electrophoresis comb;
- 4. Remove the comb for subsequent electrophoresis after the upper gel is solidified.

- 1. The dye may also be added after the addition of a gel polymerization catalyst (such as ammonium persulfate or other ammonium persulfate substitutes) and TEMED, mixed and directly perfused with the upper gel.
- 2. Due to the phenomenon of parallel electrophoresis of multiple gels in different samples, the company also provides a variety of other colors of the upper gel dye, including green, yellow, blue to distinguish different samples from different gel electrophoresis.
- It is normal for dyes to deposit or agglomerate, they can be dispersed by high-speed vortexing or ultrasonic treatment and then used. Seal the product promptly after use to prevent evaporation of the liquid.
- 4. For your safety and health, please wear safety glasses, gloves, or protective clothing.



Servicebio® Green Dye for PAGE Stacking Gel, 500X

Cat #: G2047-500UL

Product Information

Product Name	Cat. No.	Spec.
Green Dye for PAGE Stacking Gel, 500X	G2047-500UL	500 μL

Product Description/Introduction

This product is a kind of dye suitable for preparation of green polyacrylamide gel upper gels, the dye can be stable in the upper gels (stacking gels), will not enter the lower gels (separation gels) with electrophoresis. Therefore, the addition of the green dye can make the upper gels protein spotting wells clear, and it is easy to judge the margin of the top sample wells or whether they are distorted or broken, and facilitates the accurate addition of protein samples into the spotting wells. The dye will not affect the electrophoresis and staining effect, after the electrophoresis is completed, it is also easy to identify and remove the upper gel, does not affect the subsequent Western Blot and other experiments, can be used with the company's G2003, G2037 products.

Storage and Shipping Conditions

Ship at room temperature; Store at 2-8°C or room temperature; Valid for 24 months.

Assay Protocol/Procedures

- 1. Due to the special nature of the dye, precipitation may occur during storage, so please mix upside down before use;
- For a 1.0 mm gel, approximately 2 mL of upper gel solution is required to prepare a single gel, which can be added at a ratio of 2 μL of upper green dye (500 x) per 1 mL of upper gel solution and mixed well;
- 3. Add the upper gel polymerisation catalyst (such as ammonium persulphate or other ammonium persulphate substitutes) and TEMED, mix well and inject the upper gel solution between the gel plates using a pipette and insert into the electrophoresis comb;
- 4. Remove the comb for subsequent electrophoresis after the upper gel is solidified.

- 1. The dye may also be added after the addition of a gel polymerization catalyst (such as ammonium persulfate or other ammonium persulfate substitutes) and TEMED, mixed and directly perfused with the upper gel.
- 2. Due to the phenomenon of parallel electrophoresis of multiple gels in different samples, the company also provides a variety of other colors of the upper gel dye, including green, yellow, blue to distinguish different samples from different gel electrophoresis.
- It is normal for dyes to deposit or agglomerate, they can be dispersed by high-speed vortexing or ultrasonic treatment and then used. Seal the product promptly after use to prevent evaporation of the liquid.
- 4. For your safety and health, please wear safety glasses, gloves, or protective clothing.



Servicebio® Yellow Dye for PAGE Stacking Gel, 500X

Cat #: G2048-500UL

Product Information

Product Name	Cat. No.	Spec.
Yellow Dye for PAGE Stacking Gel, 500X	G2048-500UL	500 μL

Product Description/Introduction

This product is a kind of dye suitable for preparation of yellow polyacrylamide gel upper gels, the dye can be stable in the upper gels (stacking gels), will not enter the lower gels (separation gels) with electrophoresis. Therefore, the addition of the yellow dye can make the upper gels protein spotting wells clear, and it is easy to judge the margin of the top sample wells or whether they are distorted or broken, and facilitates the accurate addition of protein samples into the spotting wells. The dye will not affect the electrophoresis and staining effect, after the electrophoresis is completed, it is also easy to identify and remove the upper gel, does not affect the subsequent Western Blot and other experiments, can be used with the company's G2003, G2037 products.

Storage and Shipping Conditions

Ship at room temperature; Store at 2-8°C or room temperature; Valid for 24 months.

Assay Protocol/Procedures

- 1. Due to the special nature of the dye, precipitation may occur during storage, so please mix upside down before use;
- For a 1.0 mm gel, approximately 2 mL of upper gel solution is required to prepare a single gel, which can be added at a ratio of 2 μL of upper yellow dye (500 x) per 1 mL of upper gel solution and mixed well;
- 3. Add the upper gel polymerisation catalyst (such as ammonium persulphate or other ammonium persulphate substitutes) and TEMED, mix well and inject the upper gel solution between the gel plates using a pipette and insert into the electrophoresis comb;
- 4. Remove the comb for subsequent electrophoresis after the upper gel is solidified.

- 1. The dye may also be added after the addition of a gel polymerization catalyst (such as ammonium persulfate or other ammonium persulfate substitutes) and TEMED, mixed and directly perfused with the upper gel.
- 2. Due to the phenomenon of parallel electrophoresis of multiple gels in different samples, the company also provides a variety of other colors of the upper gel dye, including green, yellow, blue to distinguish different samples from different gel electrophoresis.
- It is normal for dyes to deposit or agglomerate, they can be dispersed by high-speed vortexing or ultrasonic treatment and then used. Seal the product promptly after use to prevent evaporation of the liquid.
- 4. For your safety and health, please wear safety glasses, gloves, or protective clothing.



Servicebio® Blue Dye for PAGE Stacking Gel, 500X

Cat #: G2049-500UL

Product Information

Product Name	Cat. No.	Spec.
Blue Dye for PAGE Stacking Gel, 500X	G2049-500UL	500 μL

Product Description/Introduction

This product is a kind of dye suitable for preparation of blue polyacrylamide gel upper gels, the dye can be stable in the upper gels (stacking gels), will not enter the lower gels (separation gels) with electrophoresis. Therefore, the addition of the blue dye can make the upper gels protein spotting wells clear, and it is easy to judge the margin of the top sample wells or whether they are distorted or broken, and facilitates the accurate addition of protein samples into the spotting wells. The dye will not affect the electrophoresis and staining effect, after the electrophoresis is completed, it is also easy to identify and remove the upper gel, does not affect the subsequent Western Blot and other experiments, can be used with the company's G2003, G2037 products.

Storage and Shipping Conditions

Ship at room temperature; Store at 2-8°C or room temperature; Valid for 24 months.

Assay Protocol/Procedures

- 1. Due to the special nature of the dye, precipitation may occur during storage, so please mix upside down before use;
- For a 1.0 mm gel, approximately 2 mL of upper gel solution is required to prepare a single gel, which can be added at a ratio of 2 μL of upper blue dye (500 x) per 1 mL of upper gel solution and mixed well;
- 3. Add the upper gel polymerisation catalyst (such as ammonium persulphate or other ammonium persulphate substitutes) and TEMED, mix well and inject the upper gel solution between the gel plates using a pipette and insert into the electrophoresis comb;
- 4. Remove the comb for subsequent electrophoresis after the upper gel is solidified.

- 1. The dye may also be added after the addition of a gel polymerization catalyst (such as ammonium persulfate or other ammonium persulfate substitutes) and TEMED, mixed and directly perfused with the upper gel.
- 2. Due to the phenomenon of parallel electrophoresis of multiple gels in different samples, the company also provides a variety of other colors of the upper gel dye, including green, yellow, blue to distinguish different samples from different gel electrophoresis.
- It is normal for dyes to deposit or agglomerate, they can be dispersed by high-speed vortexing or ultrasonic treatment and then used. Seal the product promptly after use to prevent evaporation of the liquid.
- 4. For your safety and health, please wear safety glasses, gloves, or protective clothing.



Servicebio[®] 1.5 M Tris-HCI (pH 8.8)

Cat #: G2053

Product Information

Product Name	Cat.No.	Spec.
	G2053-100ML	100 mL
1.3 M TIS-HCI (PH 0.0)	G2053-500ML	500 mL

Product Description/Introduction

This product is 1.5 M Tris-HCl buffer, pH 8.8, which can be used to prepare SDS-PAGE separation gel or as a supplement to the G2003 SDS-PAGE gel preparation kit.

Storage and Shipping Conditions

Ship and store at room temperature; Valid for 12 months.

Assay Protocol/Procedures

SDS-PAGE separation adhesives can be prepared by referring to the G2003 dispensing ratio, or appropriate separation adhesives can be prepared by themselves, or used as buffer in other experiments.

Note



Servicebio[®] 1.5 M Tris-HCI (pH 8.8)

Cat #: G2053

Product Information

Product Name	Cat.No.	Spec.
	G2053-100ML	100 mL
1.3 M TIS-HCI (PH 0.0)	G2053-500ML	500 mL

Product Description/Introduction

This product is 1.5 M Tris-HCl buffer, pH 8.8, which can be used to prepare SDS-PAGE separation gel or as a supplement to the G2003 SDS-PAGE gel preparation kit.

Storage and Shipping Conditions

Ship and store at room temperature; Valid for 12 months.

Assay Protocol/Procedures

SDS-PAGE separation adhesives can be prepared by referring to the G2003 dispensing ratio, or appropriate separation adhesives can be prepared by themselves, or used as buffer in other experiments.

Note



Servicebio[®] 1 M Tris-HCI (pH 6.8)

Cat #: G2054-100ML

Product Information

Product Name	Cat.No.	Spec.
	G2054-100ML	100 mL
	G2054-500ML	500 mL

Product Description/Introduction

This product is 1.0 M Tris-HCl buffer, pH 6.8, which can be used to prepare SDS-PAGE separation gel or as a supplement to the G2003 SDS-PAGE gel preparation kit.

Storage and Shipping Conditions

Ship and store at room temperature; Valid for 12 months.

Assay Protocol/Procedures

SDS-PAGE separation adhesives can be prepared by referring to the G2003 dispensing ratio, or appropriate separation adhesives can be prepared by themselves, or used as buffer in other experiments.

Note



Servicebio[®] 1 M Tris-HCI (pH 6.8)

Cat #: G2054-100ML

Product Information

Product Name	Cat.No.	Spec.
	G2054-100ML	100 mL
I M Tris-HCI (pH 6.8)	G2054-500ML	500 mL

Product Description/Introduction

This product is 1.0 M Tris-HCl buffer, pH 6.8, which can be used to prepare SDS-PAGE separation gel or as a supplement to the G2003 SDS-PAGE gel preparation kit.

Storage and Shipping Conditions

Ship and store at room temperature; Valid for 12 months.

Assay Protocol/Procedures

SDS-PAGE separation adhesives can be prepared by referring to the G2003 dispensing ratio, or appropriate separation adhesives can be prepared by themselves, or used as buffer in other experiments.

Note



Servicebio[®] 10% SDS Solution

Cat #: G2055

Product Information

Product Name	Cat. No.	Spec.
10% SDS Solution	G2055-5ML	5 mL
TOM 2D2 20Inflou	G2055-100ML	100 mL

Product Description/Introduction

SDS, known as sodium dodecyl sulfate, is easily soluble in water, but its solubility is sensitive to temperature and easy to precipitate from the solution at low temperature.

This product is 10% aqueous solution and can be used as a supplementary reagent in G2003 SDS-PAGE gel preparation kit or as a supplementary reagent in lysate.

Storage and Shipping Conditions

Ship and store at room temperature; Valid for 12 months.

Product Components

Name	10% SDS Solution
CAS	151-21-3
Molecular formula	$C_{12}H_{25}SO_4Na$
Molecular mass	288.38

Assay Protocol/Procedures

SDS-PAGE Gels can be prepared by referring to G2003 gelatin ratio, and other reagents can also be prepared as raw materials.

- 1. This product is easy to produce white flocculent precipitate at low temperature, which is a normal phenomenon. It will not affect the use after the water bath is rewarmed to room temperature.
- 2. For your safety and health, please wear safety glasses, gloves, or protective clothing.



Servicebio[®] 10% SDS Solution

Cat #: G2055

Product Information

Product Name	Cat. No.	Spec.
10% SDS Solution	G2055-5ML	5 mL
TOM 2D2 20Inflou	G2055-100ML	100 mL

Product Description/Introduction

SDS, known as sodium dodecyl sulfate, is easily soluble in water, but its solubility is sensitive to temperature and easy to precipitate from the solution at low temperature.

This product is 10% aqueous solution and can be used as a supplementary reagent in G2003 SDS-PAGE gel preparation kit or as a supplementary reagent in lysate.

Storage and Shipping Conditions

Ship and store at room temperature; Valid for 12 months.

Product Components

Name	10% SDS Solution
CAS	151-21-3
Molecular formula	$C_{12}H_{25}SO_4Na$
Molecular mass	288.38

Assay Protocol/Procedures

SDS-PAGE Gels can be prepared by referring to G2003 gelatin ratio, and other reagents can also be prepared as raw materials.

- 1. This product is easy to produce white flocculent precipitate at low temperature, which is a normal phenomenon. It will not affect the use after the water bath is rewarmed to room temperature.
- 2. For your safety and health, please wear safety glasses, gloves, or protective clothing.



Servicebio[®] 1 M Tris-HCl, pH 7.4 (Sterile, DNase, RNase & Proteinase free)

Cat #: G3063

Product Information

Product Name	Cat. No.	Spec.
1 M Tris-HCl, pH 7.4 (Sterile, DNase,	C2062 500M	500 ml
RNase & Proteinase free)	63003-300ML	500 ML

Product Description/Introduction

This product is 1 M Tris-HCl, pH 7.4 buffer that is sterile, free of DNase, RNase and proteinase, it can be used in various biochemical and molecular biology experiments that require no DNA enzyme contamination, and can also be used for the preparation of solutions related to cell culture that require sterility.

This product uses high purity Tris, prepared with EDI ultra-pure water and adjusted to pH 7.4 with hydrochloric acid, filtered through 0.22 μ m to remove bacteria, and tested to be free of nuclease and protease residue.

Storage and Shipping Conditions

Ship and store at room temperature. If not used for a long time, it can be stored at 2-8°C for 12 months.

- 1. Avoid RNase contamination and microbial contamination during handling. It is recommended to take it in the ultra-clean bench and wear a mask and gloves when handling.
- 2. The pH of Tris solution is easily affected by temperature and should be equilibrated to room temperature before use.



Servicebio[®] 1 M Tris-HCl, pH 7.5 (Sterile, DNase, RNase & Proteinase free)

Cat #: G3064

Product Information

Product Name	Cat. No.	Spec.
1 M Tris-HCl, pH 7.5 (Sterile, DNase,	C2064 500M	500 ml
RNase & Proteinase free)	63004-300ML	500 ML

Product Description/Introduction

This product is 1 M Tris-HCl, pH 7.5 buffer that is sterile, free of DNase, RNase and proteinase, it can be used in various biochemical and molecular biology experiments that require no DNA enzyme contamination, and can also be used for the preparation of solutions related to cell culture that require sterility.

This product uses high purity Tris, prepared with EDI ultra-pure water and adjusted to pH 7.5 with hydrochloric acid, filtered through 0.22 μ m to remove bacteria, and tested to be free of nuclease and protease residue.

Storage and Shipping Conditions

Ship and store at room temperature. If not used for a long time, it can be stored at 2-8°C for 12 months.

- 1. Avoid RNase contamination and microbial contamination during handling. It is recommended to take it in the ultra-clean bench and wear a mask and gloves when handling..
- 2. The pH of Tris solution is easily affected by temperature and should be equilibrated to room temperature before use..

SweMag-OH Silanol Magnetic Beads

	Cat.No. :	G3065-500ML
E Servicebio' 1 M Tris HC, pH 8.0 District Hans, Name 6	Brand :	Servicebio
Haman Bage Annual Annua	Spec.:	500 mL (pH 8.0)

Product Introduction

Product Information

Product Name	Cat. No.	Spec.
	G3650-25ML	25 mL
SweMag-OH Silanol Magnetic Beads	G3650-100ML	100 mL
	G3650-500ML	500 mL

Product Description/Introduction

The magnetic beads are specially designed for nucleic acid extraction and purification. Its surface is coated with silica and contains a large number of silanol groups (hydroxyl groups), which can specifically bind to nucleic acids in solution through hydrophobic, hydrogen bonding and electrostatic interactions under high salt and low pH conditions, without binding to other impurities (e.g., proteins). It rapidly isolate nucleic acids from biological samples, is safe and simple to operate, and is highly conducive to automated and high-throughput extraction of nucleic acids.

Product Performance

Strong nucleic acid binding ability: The amount of DNA bound to per milligram of magnetic beads is greater than 20 milligrams.

Good operating performance: superparamagnetic, magnetic response time <30 sec.

Good stability and batch-to-batch repeatability.

The large specific surface area is favorable for binding with nucleic acids.

Application

Genomic DNA/RNA extraction from blood, tissue, plant and microorganism samples;

DNA/RNA extraction from urine, serum and nasopharyngeal swabs;

Viral nucleic acid extraction;

Plasmid, PCR product extraction and purification, etc.

Storage and Shipping Conditions

Ship at room temperature; store at 2-8°C up to 24 months; store at room temperature up to 12 months.

Note

1. Magnetic beads are stored in 20% ethanol and need to be washed with buffer before use.

1. Freezing, drying and centrifugation may affect the performance of magnetic beads.

2. It is normal for the beads to settle due to gravity. Before using the product, be sure to oscillate or sonicate the beads sufficiently to keep them evenly suspended.

2. The product needs to be used with magnetic separation equipment.

3. The product can be stored in 20% ethanol, stable at 2-8°C, and for 12 months at room temperature.



Servicebio[®] 1 M Tris-HCl, pH 8.5 (Sterile, DNase, RNase & Proteinase free)

Cat #: G3066

Product Information

Product Name	Cat. No.	Spec.
1 M Tris-HCl, pH 8.5 (Sterile, DNase,	C2066 500MI	500 ml
RNase & Proteinase free)	63000-300ML	500 ML

Product Description/Introduction

This product is 1 M Tris-HCl, pH 8.5 buffer that is sterile, free of DNase, RNase and proteinase, it can be used in various biochemical and molecular biology experiments that require no DNA enzyme contamination, and can also be used for the preparation of solutions related to cell culture that require sterility.

This product uses high purity Tris, prepared with EDI ultra-pure water and adjusted to pH 8.5 with hydrochloric acid, filtered through 0.22 μ m to remove bacteria, and tested to be free of nuclease and protease residue.

Storage and Shipping Conditions

Ship and store at room temperature. If not used for a long time, it can be stored at 2-8°C for 12 months.

- 1. Avoid RNase contamination and microbial contamination during handling. It is recommended to take it in the ultra-clean bench and wear a mask and gloves when handling.
- 2. The pH of Tris solution is easily affected by temperature and should be equilibrated to room temperature before use.

Servicebio[®] Modified Coagulant

Cat. #: G5036

Product Information

Product Name	Cat. No.	Spec.
Modified Coagulant	G5036-5ML	1 mL×5

Product Description/Introduction

Modified coagulant is an alternative to ammonium persulphate for PAGE and SDS-PAGE gel preparation; it is more stable than 10% ammonium persulphate solution when stored at 4°C, and is used in the same way as 10% ammonium persulphate.

Storage and Shipping Conditions

Store at -20°C away from light, valid for 12 months; Store at 2-8°C away from light, valid for 6 months

Product Components

Component	G5036-5ML
Modified Coagulant	1 mL×5
Manual	1 pc

- The stability of the modified coagulant is better than that of ammonium persulfate (AP). Store it at 4°C after use, so that it can be stored for six months for subsequent routine use. If it is not used for a long time, please store it at-20 °C to avoid repeated freezing and thawing.
- 2. Cast the gel as soon as possible after adding the modified coagulant, do not leave it for a long time.
- 3. If further acceleration of the gelation speed is required, the amount of modified coagulant can be increased by 0.5 times.
- 4. Temperature has a greater impact on the solidification time of the gel, generally the lower the temperature, the longer the solidification time, in order to ensure the progress of the experiment, it can be appropriate to increase or reduce the amount of improved coagulant according to the temperature.



Servicebio[®] 5 x SDS-PAGE Loading Buffer (Reduced)

Cat #: G2013

删除[Raisin]: -1ML

Product Information

Product Name	Cat. No.	Spec.
5 x SDS-PAGE Loading Buffer (Reduced)	G2013-1ML	1 mL
	G2013-100ML	100 mL

Product Description/Introduction

This product is a 5x concentrated protein loading buffer with Bromophenol Blue as the dye. It is used for routine electrophoretic loading of SDS-PAGE protein samples. It contains Tris-HCl buffer, glycerol, SDS, bromophenol blue and a small amount of reducing agent DTT.

Storage and Shipping Conditions

Ship with wet ice, store at -20°C, valid for 12 months.

Product Components

Component	G2013-1ML	G2013-100ML
5× SDS-PAGE Loading Buffer (Reduced)	1 mL	100 mL
manual		1

Assay Protocol/Procedures

- 1. Mix each 4 μ L protein sample with 1 μ L 5× SDS-PAGE Loading Buffer (reduced sample).
- 2. Heat in a metal bath or boiling water bath for 3-5 minutes to fully denature the protein sample.
- 3. Cool to room temperature and add to the spot wells.

- 1. This product contains a small amount of the reducing agent DTT and has a slightly irritating odour, but does not contain mercaptoethanol. Please take care when use.
- 2. The product should be returned to room temperature before use.
- 3. For your safety or health, please wear safety glasses, gloves, or protective clothing.



Servicebio[®] 5 x SDS-PAGE Loading Buffer (Reduced)

Cat #: G2013

删除[Raisin]: -

Product Information

Product Name	Cat. No.	Spec.
5 x SDS-PAGE Loading Buffer (Reduced)	G2013-1ML	1 mL
	G2013-100ML	100 mL

Product Description/Introduction

This product is a 5x concentrated protein loading buffer with Bromophenol Blue as the dye. It is used for routine electrophoretic loading of SDS-PAGE protein samples. It contains Tris-HCl buffer, glycerol, SDS, bromophenol blue and a small amount of reducing agent DTT.

Storage and Shipping Conditions

Ship with wet ice, store at -20°C, valid for 12 months.

Product Components

Component	G2013-1ML	G2013-100ML
5× SDS-PAGE Loading Buffer (Reduced)	1 mL	100 mL
manual		1

Assay Protocol/Procedures

- 1. Mix each 4 μ L protein sample with 1 μ L 5× SDS-PAGE Loading Buffer (reduced sample).
- 2. Heat in a metal bath or boiling water bath for 3-5 minutes to fully denature the protein sample.
- 3. Cool to room temperature and add to the spot wells.

- 1. This product contains a small amount of the reducing agent DTT and has a slightly irritating odour, but does not contain mercaptoethanol. Please take care when use.
- 2. The product should be returned to room temperature before use.
- 3. For your safety or health, please wear safety glasses, gloves, or protective clothing.



Servicebio[®] 5 x SDS-PAGE Loading Buffer (Non-Reduced)

Cat #: G2030-1ML

Product Information

Product Name	Cat. No.	Spec.
5 x SDS-PAGE Loading Buffer (Non-Reduced)	G2030-1ML	1 mL

Product Description/Introduction

This product is a 5x concentrated protein loading buffer with Bromophenol Blue as the dye for the electrophoretic loading of non-reduced SDS-PAGE protein samples. It contains Tris-HCl buffer, glycerol, SDS and bromophenol blue.

Storage and Shipping Conditions

Ship with wet ice, store at -20°C, valid for 12 months.

Product Components

Component	G2030-1ML
5× SDS-PAGE Loading Buffer (Non-Reduced)	1 mL
Manual	1 pc

Assay Protocol/Procedures

- 1. Mix well 1 μ L of 5× SDS-PAGE Loading Buffer (non-reducing type) per 4 μ L of protein sample .
- 2. Heat in a metal or boiling water bath for 3-5 minutes to fully denature the protein sample.
- 3. Cool to room temperature and load on the gels.

- 1. Ensure that the product is fully re-warmed before use.
- 2. For your safty and health, please wear safety glasses, gloves, or protective clothing.



Servicebio[®] 2 x SDS-PAGE Loading Buffer (Reduced)

Cat #: G2031-1ML

Product Information

Product Name	Cat. No.	Spec.
2 x SDS-PAGE Loading Buffer (Reduced)	G2031-1ML	1 mL

Product Description/Introduction

This product is a 2x concentrated protein loading buffer with Bromophenol Blue as the dye for the electrophoretic loading of reduced SDS-PAGE protein samples. It contains Tris-HCl buffer, glycerol, SDS and bromophenol blue and a small amount of reducing agent DTT.

Storage and Shipping Conditions

Ship with wet ice; Store at -20°C, valid for 12 months.

Product Components

Component	G2031-1ML
2× SDS-PAGE Loading Buffer (Reduced)	1 mL
Manual	

Assay Protocol/Procedures

- 1. Mix well with an equal volume ratio of 2× SDS-PAGE Loading Buffer (reduced) to protein sample.
- 2. Heat in a metal or boiling water bath for 3-5 minutes to fully denature the protein sample.
- 3. Cool to room temperature and load on the gels.

- 1. This product contains a small amount of the reducing agent DTT, has a slightly pungent odor, but does not contain mercaptoethanol. Please pay attention to protection when use.
- 2. Make sure the product is fully re-warmed before use.
- 3. For your safety or health, please wear safety glasses, gloves, or protective clothing.



Servicebio[®] 2 x SDS-PAGE Loading Buffer (Non-Reduced)

Cat #: G2032-1ML

Product Information

Product Name	Cat. No.	Spec.
2 x SDS-PAGE Loading Buffer (Non-Reduced)	G2032-1ML	1 mL

Product Description/Introduction

The 2× SDS-PAGE Loading Buffer (Non-Reduced) containing Tris-HCl buffer (63 mM, pH6.8), glycerol (10%), SDS (2%) and bromophenol blue (0.0025%), is used for electrophoretic loading of non-reducing SDS-PAGE protein samples.

Storage and Shipping Conditions

Ship with wet ice, store at -20°C, valid for 12 months.

Product Components

Component	G2032-1ML
2× SDS-PAGE Loading Buffer (Non-Reduced)	1 mL
manual	1 <u>pc</u>

Assay Protocol/Procedures

- 1. Mix well 1 μ L of 1× SDS-PAGE Loading Buffer (non-reduced) per 1 μ L of protein sample .
- 2. Heat to 95°C for 3-5 minutes to fully denature the protein sample.
- 3. Cool to room temperature and load on the gels.

- 1. The product should be returned to room temperature before use.
- 2. For your safety or health, please wear safety glasses, gloves, or protective clothing.



Servicebio[®] 5×Native-PAGE Loading Buffer

Cat #: G2034-1ML

Product Information

Product Name	Cat. No.	Spec.
5×Native-PAGE Loading Buffer	G2034-1ML	1 mL

Product Description/Introduction

This product is 5×Native-PAGE Loading Buffer with Bromophenol Blue as dye for electrophoretic uploading of non-reduced, non-denatured PAGE protein samples. The main components of this product include Tris-HCl buffer, glycerol and bromophenol blue.

Storage and Shipping Conditions

Ship at wet ice, store at 4°C, valid for 12 months.

Product Components

Component	G2034-1ML
5×Native-PAGE Loading Buffer	1 mL
manual	1 pc

Assay Protocol/Procedures

Mix well 1 μ L of 5×Native-PAGE Loading Buffer per 4 μ L of protein sample and load on the gels.

- 1. The product should be returned to room temperature before use.
- 2. For your safety or health, please wear safety glasses, gloves, or protective clothing.



Servicebio[®] 5×SDS-PAGE Protein Loading Buffer (Odorless, Reducing)

Cat # : G2075

Product Information

Product Name	Cat. No.	Spec.
5×SDS-PAGE Protein Loading Buffer (Odorless, Reducing)	G2075-1ML	1 mL
	G2075-10ML	10 mL
	G2075-100ML	100 mL

Product Description/Introduction

5 × SDS-PAGE Protein Loading Buffer(Odorless, Reducing) is the most commonly used sample buffer for Sodium Dodecyl Sulfate-Polyacrylamide Gel Electrophoresis (SDS-PAGE) of denatured proteins. The product contains bromophenol blue, which can confirm the progress of electrophoresis.

In addition, the product contains odorless reducing agent instead of dithiothreitol (DTT) or mercaptoethanol, making the protein loading operation safer and healthier, and the water solubility is more stable.

Storage and Shipping Conditions

Ship with wet ice; Store at -20°C; Valid for 12 months.

Product Components

Component	G2075-1ML	G2075-10ML	G2075-100ML
5×SDS-PAGE Protein Loading Buffer	1 mL	10 mL	100 mL
(Odorless, Reducing)			
Manual		One copy	

Assay Protocol/Procedures

- Dissolve 5× SDS-PAGE Protein Sampling Buffer in a water bath at room temperature or 37°C before use, store at room temperature immediately after dissolution in a water bath, avoid prolonged placement in a water bath, and store at -20°C after use.
- 2. Add the appropriate volume according to the ratio of protein sample: $5 \times$ SDS-PAGE Protein Sampling Buffer = 4:1. Note: This product can also be used directly for lysis of cell or tissue samples after dilution to $1 \times$.
- 3. Heat at 95°C in a water or metal bath for 10 min to fully denature the proteins.
- 4. Allow the tube to reach room temperature and thoroughly mix before use;
- 5. The samples can be loaded directly after reaching to room temperature;
- 6. Electrophoresis can be stopped until the blue dye reaches the bottom of the gel.

Notes

- 1. This product may precipitate particles when stored at low temperatures, ensure that the product is fully rewarmed and dissolved evenly before use, and store at -20°C as soon as possible after use.
- 2. Avoid direct contact between reagents and skin.
- 3. For your safety or health, please wear safety glasses, gloves, or protective clothing.


Servicebio[®] 5×SDS-PAGE Protein Loading Buffer (Odorless, Reducing)

Cat # : G2075

Product Information

Product Name	Cat. No.	Spec.
5×SDS-PAGE Protein Loading Buffer (Odorless, Reducing)	G2075-1ML	1 mL
	G2075-10ML	10 mL
	G2075-100ML	100 mL

Product Description/Introduction

5 × SDS-PAGE Protein Loading Buffer(Odorless, Reducing) is the most commonly used sample buffer for Sodium Dodecyl Sulfate-Polyacrylamide Gel Electrophoresis (SDS-PAGE) of denatured proteins. The product contains bromophenol blue, which can confirm the progress of electrophoresis.

In addition, the product contains odorless reducing agent instead of dithiothreitol (DTT) or mercaptoethanol, making the protein loading operation safer and healthier, and the water solubility is more stable.

Storage and Shipping Conditions

Ship with wet ice; Store at -20°C; Valid for 12 months.

Product Components

Component	G2075-1ML	G2075-10ML	G2075-100ML
5×SDS-PAGE Protein Loading Buffer	1 ml	10 ml	100 ml
(Odorless, Reducing)		TO HIF	100 ML
Manual	One copy		

Assay Protocol/Procedures

- Dissolve 5× SDS-PAGE Protein Sampling Buffer in a water bath at room temperature or 37°C before use, store at room temperature immediately after dissolution in a water bath, avoid prolonged placement in a water bath, and store at -20°C after use.
- 2. Add the appropriate volume according to the ratio of protein sample: $5 \times$ SDS-PAGE Protein Sampling Buffer = 4:1. Note: This product can also be used directly for lysis of cell or tissue samples after dilution to $1 \times$.
- 3. Heat at 95°C in a water or metal bath for 10 min to fully denature the proteins.
- 4. Allow the tube to reach room temperature and thoroughly mix before use;
- 5. The samples can be loaded directly after reaching to room temperature;
- 6. Electrophoresis can be stopped until the blue dye reaches the bottom of the gel.

Notes

- 1. This product may precipitate particles when stored at low temperatures, ensure that the product is fully rewarmed and dissolved evenly before use, and store at -20°C as soon as possible after use.
- 2. Avoid direct contact between reagents and skin.
- 3. For your safety or health, please wear safety glasses, gloves, or protective clothing.



Servicebio[®] 2×SDS-PAGE Protein Loading Buffer (Odorless, Reducing)

Cat #: G2076-1ML

Product Information

Product Name	Cat. No.	Spec.
2×SDS-PAGE Protein Loading Buffer (Odorless, Reducing)	G2076-1ML	1 mL

Product Description/Introduction

This product, 2×SDS-PAGE Protein Loading Buffer (Odorless, Reducing), uses the reducing properties and dithiothreitol (DTT) or mercaptoethanol (odor) similar substances, and no smell, water solubility is more stable, the use of the effect and the conventional SDS-PAGE protein sampling buffer has no significant difference, so it makes the operation of protein sampling safer and healthier.

Storage and Shipping Conditions

Ship with wet ice; Store at -20°C; Valid for 12 months.

Product Components

Component	G2076-1ML
2×SDS-PAGE Protein Loading Buffer (Odorless, Reducing)	1 mL
Instruction Manual	One copy

Assay Protocol/Procedures

- Dissolve 2×SDS-PAGE Protein Loading Buffer in a water bath at room temperature or 37°C before use, store at room temperature immediately after dissolution in a water bath, avoid prolonged placement in a water bath, and store at -20°C after use.
- Add the appropriate volume according to the ratio of protein sample: 2× SDS-PAGE Protein Sampling Buffer = 1:1. Note: This product can also be used directly for lysis of cell or tissue samples after dilution to 1×.
- 3. Heat at 95°C in a water or metal bath for 10 min to fully denature the proteins.
- 4. The samples can be loaded directly after reaching to room temperature;
- 5. Electrophoresis can be stopped until the blue dye reaches the bottom of the gel.

Notes

- 1. Dissolve completely before use, and store at -20°C immediately after use.
- 2. Avoid direct contact between reagents and skin.
- 3. For your safety or health, please wear safety glasses, gloves, or protective clothing.



Servicebio[®] Prestained Protein Marker II (10-200 kDa)

Cat #: G2058-250UL

Product Information

Product Name	Cat. No.	Spec.
Prestained Protein Marker II (10-200 kDa)	G2058-250UL	250 μL

Product Description/Introduction

Prestained Protein Marker II consists of ten high-purity and pre-stained recombinant proteins, which is convenient for monitoring of electrophoresis and transfer efficiency. It is suitable as a protein molecular weight standard for SDS-PAGE and Western Blot.

The bands display in Tris-Glycine gel range from 10-200 kDa (~10, ~18, ~23, ~30, ~42, ~55, ~75, ~110, ~140, ~200 kDa), with orange-red band at 75 kDa, rose-red band at 10 kDa, and blue bands at the others.

Storage and Shipping Conditions

Ship with wet ice; Store at -20°C; Valid for 12 months.

Product Components

Component Number	Component	G2058-250UL
G2058-1	Prestained Protein Marker II	250 μL
Manual		One copy

Assay Protocol/Procedures

- 1. Thaw the marker to room temperature and mix thoroughly before use.
- 2. In a conventional mini or midi electrophoresis system, the loading volume of Prestained Protein Marker II is 5-10 μ L.
- 3. Store at -20°C immediately after use.

- 1. This product is ready-to-use, no need to add reducing agent.
- 2. This product cannot be heated, which will cause the protein bands to degrade or discolor.
- 3. For your safety or health, please wear safety glasses, gloves, or protective clothing.



Fig 1. Reference molecular weight of Prestained Protein Marker II



Servicebio[®] Prestained Protein Marker IV (8-200 kDa)

Cat #: G2083-250UL

Product Information

Product Name	Cat. No.	Spec.
Prestained Protein Marker IV (8-200 kDa)	G2083-250UL	250 μL

Product Description/Introduction

This product, Prestained Protein Marker IV, is composed of 11 highly pure and pre-stained recombinant proteins. It indicates a molecular weight range of 8-200 kDa in Tris-Glycine gel (\sim 8, \sim 13, \sim 20, \sim 30, \sim 40, \sim 55, \sim 68, \sim 90, \sim 110, \sim 140, \sim 200 kDa), with the 90, 30, and 8 kDa markers appearing as pink bands, while the others appear as blue bands. This allows for the dynamic observation of protein electrophoresis or the assessment of protein transfer efficiency. It is suitable as a protein molecular weight standard for SDS-PAGE and Western blot.

Storage and Shipping Conditions

Ship with wet ice; Store at -20°C, valid for 12 months.

Product Components

Component Number	Component	G2083-250UL
G2083	Prestained Protein Marker IV(8-200 kDa)	250 μL
Manual		One copy

Assay Protocol/Procedures

- 1. This product is ready-to-use, without adding reducing agent or heating. Remove Prestained Protein Marker stored at -20°C and thawing at room temperature before mix gently and thoroughly;
- 2. Take 5-10 µL (G2083) and the experimental samples for protein electrophoresis; It is suggested that qualified laboratories can determine the appropriate sample amount by pre-experiment according to their own experimental conditions and experimental habits when using this product for the first time, which can not only save costs, but also obtain better results.
- 3. Store at -20°C immediately after using Prestained Protein Marker (It is recommended that 5-10 μL be stored separately).

- 1. This pre-stained protein molecular weight standard cannot be heated to 100 °C, which will lead to degradation or decolorization of protein bands.
- 2. Extending the transfer time or increasing the transfer voltage when western blotting large molecular weight proteins.
- 3. The molecular weight of reference prestained proteins in the figure is based on the molecular weight of non-prestained proteins.
- This Prestained Protein Marker can be stored at room temperature for ≥ 20 days; Store at 2-8 °C for ≥ 2 months; Store at -20 °C for ≥ 12 months.
- 5. For your safety or health, please wear safety glasses, gloves, or protective clothing.





Figure 1. Prestained Protein Marker IV reference molecular weight size



Servicebio[®] Prestained Protein Marker VI (55-320 kDa)

Cat #: G2085-250UL

Product Information

Product Name	Cat. No.	Spec.
Prestained Protein Marker VI (55-320 kDa)	G2085-250UL	250 μL

Product Description/Introduction

Prestained Protein Marker VI consists of 8 high-purity and prestained recombinant proteins, which is convenient for monitoring of electrophoresis and transfer efficiency. It is suitable as a protein molecular weight standard for SDS-PAGE and Western Blot.

The bands display in Tris-Glycine gel range from 55-320 kDa (\sim 55, \sim 65, \sim 90, \sim 130, \sim 165, \sim 210, \sim 270, \sim 320 kDa), With orange-red band at 90 kDa, and blue bands at the others.

Storage and Shipping Conditions

Ship with wet ice; Store at -20°C; Valid for 12 months.

Product Components

Component Number	Component	G2085-250UL
G2085	Prestained Protein Marker VI (55-320 kDa)	250 μL
Manual		One copy

Assay Protocol/Procedures

- 1. Allow the tube to reach room temperature and thoroughly mix before use.
- 2. In a conventional mini or midi electrophoresis system, the loading volume of Prestained Protein Marker VI is 5-10 μ L.
- 3. Prestained Protein Marker III should be stored at -20°C immediately after use.

Notes

- 1. This product is ready-to-use, no need to add reducing agent.
- 2. This product cannot be heated, which will cause the protein bands to degrade or discolor.
- 3. Extending the transfer time or increasing the transfer voltage when western blotting large molecular weight proteins.
- 4. For your safety or health, please wear safety glasses, gloves, or protective clothing.





Fig 1. Reference molecular weight of Prestained Protein Marker VI



Servicebio[®] Western Protein Marker I (Exposure)

Cat #: G2086-250UL

Product Information

Product Name	Cat. No.	Spec.
Western Protein Marker I (Exposure)	G2086-250UL	250 μL

Product Description/Introduction

Western Protein Marker I consists of eight high-purity recombinant proteins and two pre-stained recombinant proteins, which is convenient for monitoring of electrophoresis and transfer efficiency. It is suitable as a protein molecular weight standard for SDS-PAGE and Western Blot.

The bands display in Tris-Glycine gel range from 15-154 kDa (~12, ~22, ~28, ~38, ~50, ~62, ~70, ~78, ~113, ~154 kDa), with orange-red band at 70 kDa, blue band at 12 kDa, and the others can bind almost all types of antibodies (except chicken antibodies). Western Protein Marker I can bind the antibody to the target protein at the same time and develop color by ECL or other methods.

Storage and Shipping Conditions

Ship with wet ice; Store at -20°C; Valid for 12 months.

Product Components

Component Number	Component	G2086-250UL
G2086-1	Western Protein Marker I (Exposure)	250 μL
G2086-2	Dilution Buffer	2×1 mL
	Manual	One copy

Assay Protocol/Procedures

- 1. Allow the tube to reach room temperature and thoroughly mix before use.
- 2. For the use of primary antibody of mouse origin, it is recommended to take this product 5 µL for simultaneous protein electrophoresis with the experimental sample; For the use of primary antibody of rabbit origin, it is recommended that 5 µL of this product be diluted 4 times with the supplied Dilution Buffer and the samples be subjected to simultaneous protein electrophoresis; It is suggested that qualified laboratories can determine the appropriate sample amount by pre-experiment according to their own experimental conditions and experimental habits when using this product for the first time, which can not only save costs, but also obtain better results.
- 3. Prestained Protein Marker II should be stored at -20°C immediately after use. (It is recommended that be stored separately).

Notes

- 1. If the Western protein marker I exposed band is thick, it can be used after appropriate dilution with the buffer. It is normal for the colour of the two prestained protein bands in the marker to diminish accordingly after dilution.
- 2. This product cannot be heated, which will cause the protein bands to degrade or discolor.
- 3. For your safety or health, please wear safety glasses, gloves, or protective clothing.





Fig 1. Reference molecular weight of Western protein marker I



Servicebio[®] Prestained Protein Marker VII (8-195 kDa)

Cat. #: G2087

Product Information

Product Name	Cat. No.	Spec.
Prestained Protein Marker VII (8-195 kDa)	G2087-250UL	250 μL

Product Description

Western Protein Marker VII is a prestained mixture of ten high-purity recombinant proteins (no His-tag), The bands display in Tris-Glycine gel range from 8-195 kDa (~8, ~13, ~20, ~28, ~40, ~55, ~70, ~105, ~140, ~195 kDa), of which 70 kDa and 8 kDa are rose-red bands, others are blue bands. which is convenient for monitoring of electrophoresis and transfer efficiency. It is suitable as a protein molecular weight standard for SDS-PAGE and Western Blot.

Shipping and Storage Conditions

Ship with wet ice; Store at -20°C, valid for 12 months.

Product Component

Component Number	Component	G2087-250UL
G2087-1	Prestained Protein Marker VII	250 μL
	Manual	1 pc

Instructions for Use

- 1. This product is ready to use with no heating, diluting or additional reducing agent necessary. Thaw at room temperature and mix gently and thoroughly.
- 2. Take 5-10 µ L (G2087) and samples for protein electrophoresis; It is suggested that qualified laboratories can determine the appropriate sample volume by their own experimental conditions and habits when using this product for the first time, which can not only save costs, but also obtain better experimental figures.
- 3. Prestained Protein Marker II should be stored at -20°C immediately after use.

- 1. Do not boil the protein marker, which can lead to degradation or decolourisation of protein bands
- 2. Extend the transfer time or increase the transfer voltage for Western blot of large molecular weight proteins
- 3. The molecular weight of the reference prestained protein in the figure is calibrated from the molecular weight of the non-prestained protein.



- This Prestained Protein Marker can be stored at room temperature for ≥ 20 days; Store at 2-8 °C for ≥ 2 months; Store at -20 °C for ≥ 12 months.
- 5. For your safety and health, please wear safety glasses, gloves, or protective clothing.



Pic. 1. Band profile of Prestained Protein Marker VI

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Servicebio[®] Western Protein Marker II (Exposure)

Cat. #: G2088

Product Information

Product Name	Cat. No.	Spec.
Western Protein Marker II (Exposure)	G2088-250UL	250 μL

Product Description/Introduction

The Western Protein Marker II is a prestained, visualizable mixture of 7 high-purity recombinant proteins and 3 prestained recombinant proteins. The bands display in Tris-Glycine gel range from 30-209 kDa (~30, 38, 50, 62, ~70, 78, ~105, ~113, 154, 209 kDa), of which 70 kDa is the red pre-stained band, 30 kDa and 105 kDa are the blue pre-stained bands to monitor of electrophoresis and transfer efficiency. The seven recombinant proteins (38, 50, 62, 78, 113, 154, 209 kDa) can bind almost all types of antibodies (except chicken antibodies) and can bind antibodies simultaneously with the target protein and can be colourised by ECL or other means.

Product features

1. 70 kDa is a rose red pre stained band, and 30 and 105 kDa are blue pre stained bands, which are convenient for observing the electrophoresis status, determining the membrane transfer effect and direction;

2. Seven Marker bands can be colored together with the target protein, facilitating timely determination of the molecular weight of the target protein after color development (without the need for classical methods to label and compare protein molecular weight standard bands on the membrane);

3. Seven Marker bands are not labeled or coupled to other molecules, indicating more accurate protein molecular weight.

Shipping and Storage Conditions

Ship with wet ice; Store at -20°C, valid for 12 months.

Product Component

Component Number	Component	G2088-250UL
G2088-1	Western Protein Marker II	250 μL
G2088-2	Dilution Buffer	1 mL
	Manual	1 pc

Instructions for Use

- 1. This product is ready to use with no heating, diluting or additional reducing agent necessary. Thaw at room temperature and mix gently and thoroughly.
- 2. It is suggested that qualified laboratories can determine the appropriate sample volume by their own experimental conditions and habits when using this product for the first time, which can not only save costs, but also obtain better experimental figures (For primary antibodies of mouse origin, 5 μL of this product is recommended for simultaneous protein electrophoresis with the sample; for primary antibodies of rabbit origin, 5 μL of this product is recommended for simultaneous protein electrophoresis with the sample after 4-fold dilution in the Dilution Buffer provided).



3. Prestained Protein Marker II should be stored at -20°C immediately after use.

Note

- 1. Do not boil the protein marker, which can lead to degradation or decolourisation of protein bands
- 2. If the Western Protein Marker has a thicker band, it can be used after appropriate dilution with Dilution Buffer, which will weaken the colour of the three pre-stained protein bands in the Marker.
- 3. Due to the uneven specificity of antibodies on the market, it is normal to encounter the development of pre-stained bands, which can be clearly distinguished according to the size of the location;
- This prestained protein marker can be stored at room temperature for ≥20 days; store at 2-8°C for ≥20 months; store at -20°C for ≥12 months.
- 5. For your safety and health, please wear safety glasses, gloves, or protective clothing.



10% Tris-Glycine SDS-PAGE (5 µL/well)

Figure 1. Band profile of Western Protein Marker II

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Servicebio[®] Prestained Protein Marker VIII (8-270 kDa)

Cat. #: G2089

Product Information

Product Name	Cat. No.	Spec.
Prestained Protein Marker VIII (8-270 kDa)	G2089-250UL	250 μL

Product Description

Western Protein Marker VIII is a prestained mixture of eleven high-purity recombinant proteins, The bands display in Tris-Glycine gel range from 8-270 kDa (~8, ~13, ~20, ~30, ~40, ~55, ~68, ~90, ~130, ~165, ~270 kDa), of which 90 kDa, 30 kDa and 8 kDa are rose-red bands, others are blue bands. which is convenient for monitoring of electrophoresis and transfer efficiency. It is suitable as a protein molecular weight standard for SDS-PAGE and Western Blot.

Shipping and Storage Conditions

Ship with wet ice; Store at -20°C, valid for 12 months.

Product Component

Component Number	Component	G2089-250UL
G2089-1	Prestained Protein Marker VIII	250 μL
	Manual	1 pc
	Manual	1 pc

Instructions for Use

- 1. This product is ready to use with no heating, diluting or additional reducing agent necessary. Thaw at room temperature and mix gently and thoroughly.
- 2. Take 3-10 µ L (G2089) and samples for protein electrophoresis; It is suggested that qualified laboratories can determine the appropriate sample volume by their own experimental conditions and habits when using this product for the first time, which can not only save costs, but also obtain better experimental figures.
- 3. Prestained Protein Marker VIII should be stored at -20°C immediately after use.

- 1. Do not boil the protein marker, which can lead to degradation or decolourisation of protein bands.
- 2. Extend the transfer time or increase the transfer voltage for Western blot of large molecular weight proteins
- 3. The molecular weight of the reference prestained protein in the figure is calibrated from the molecular weight of the non-prestained protein.



- This prestained protein marker can be stored at room temperature for ≥20 days; store at 2-8°C for ≥20 months; store at -20°C for ≥12 months.
- 5. For your safety and health, please wear safety glasses, gloves, or protective clothing.



Pic. 1. Band profile of Prestained Protein Marker VIII

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Servicebio[®] Prestained Protein Marker IX (2-40 kDa)

Cat. #: G2090

Product Information

Product Name	Cat. No.	Spec.
Prestained Protein Marker IX (2-40 kDa)	G2090-250UL	250 μL

Product Description

Western Protein Marker IX is a prestained mixture of seven high-purity recombinant proteins and peptides, The bands display in Tris-Glycine gel range from 2-40 kDa (~ 2 , ~ 4.5 , ~ 8 , ~ 13 , ~ 20 , ~ 30 , ~ 40 kDa), of which 30 kDa and 8 kDa are rose-red bands, others are blue bands. which is convenient for monitoring of electrophoresis and transfer efficiency. It is suitable as a protein molecular weight standard for SDS-PAGE and Western Blot.

Shipping and Storage Conditions

Ship with wet ice; Store at -20°C, valid for 12 months.

Product Component

Component Number	Component	G2090-250UL
G2090-1	Prestained Protein Marker IX	250 μL
	Manual	1 pc

Instructions for Use

- 1. This product is ready to use with no heating, diluting or additional reducing agent necessary. Thaw at room temperature and mix gently and thoroughly.
- 2. Take 5-10 μL (G2090) and samples for protein electrophoresis; It is suggested that qualified laboratories can determine the appropriate sample volume by their own experimental conditions and habits when using this product for the first time, which can not only save costs, but also obtain better experimental figures. Small molecular weight proteins electrophoresis using Tris-Tricine gel system (recommended G2159), other gel systems can not separate proteins below 10 kDa; WB transfer membrane need to use 0.22 μM pore size PVDF membranes (reference conditions: 300 mA, 30 min).
- 3. Prestained Protein Marker IX should be stored at -20 °C immediately after use (5-10 μ L recommended for storage and use).

Note

1. Do not boil the protein marker, which can lead to degradation or decolourisation of protein bands.



- Small molecular weight prestained Marker is recommended to use Tris-Tricine gel system, 100 V electrophoresis for 4-5 h, need to be ice bath throughout the whole process; transfer membrane need to use 0.22 μM pore size PVDF membrane, the reference conditions: 300 mA, 30 min.
- This prestained protein marker can be stored at room temperature for ≥20 days; store at 2-8°C for ≥20 months; store at -20°C for ≥12 months.
- 4. The molecular weight of the reference prestained protein in the figure is calibrated from the molecular weight of the non-prestained protein.
- 5. For your safety and health, please wear safety glasses, gloves, or protective clothing.



Pic. 1. Band profile of Prestained Protein Marker IX

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Servicebio[®] Protein Marker 10-180 KDa

Cat #: G26616-250UL

Product Information

Product Name	Cat. No.	Spec.
Protein Marker 10-180 KDa	G26616-250UL	250 μL

Product Description/Introduction

Protein marker(10 to 180kDa) Molecular weight: 180, 130, 100, 70, 55, 40, 35, 25, 15, 10kDa Type of dye: 3colors: Blue, Orange, Green

Storage and Shipping Conditions

Ship with wet ice; Store at -20°C; Valid for 12 months.





Servicebio® Protein Marker 10-250 kDa

Cat #: G26619-250UL

Product Information

Product Name	Cat. No.	Spec.
Protein Marker 10-250 kDa	G26619-250UL	250 μL

Product Description/Introduction

Protein marker(10-250kDa)

Molecular weight: 250, 130, 100, 70, 55, 35, 25, 15, 10kDa

Type of dye: 3colors: Blue, Orange, Green

Storage and Shipping Conditions

Ship with wet ice; Store at -20°C; Valid for 12 months.





Servicebio[®] Tris-Glycine SDS-PAGE Running Buffer (Powder)

Cat #: G2018-1L

Product Information

Product Name	Cat. No.	Spec.
Tris-Glycine SDS-PAGE Running Buffer (Powder)	G2018-1L	1 L
	G2018-15	15 bags, powder

Product Description/Introduction

Tris-Glycine SDS-PAGE Running Buffer (Powder) is a powder form of Tris-Glycine SDS-PAGE protein gel electrophoresis buffer. The powder is fine, dissolves quickly, and is easy to use. After reconstitution, it can be used in Tris-Glycine system protein gel electrophoresis. The main components are 25 mM Tris, 250 mM glycine, 0.1% SDS, pH 8.0-8.6@25℃.

Shipping Conditions

Ship and store at room temperature; Valid for 24 months.

Assay Protocol/Procedures

Each bag of this product can be used after it is fully dissolved in purified water and volume to 1000 mL.

Note

1. Please use as soon as possible after dissolving.

2. This electrophoresis buffer is only suitable for Tris-Glycine system protein gel electrophoresis, and can be used with G2003, G2037, G2041, G2042, G2043, G2044, G2045, G2060, G2061, G2062, G2063, G2064 3.To get better electrophoresis results, it is not recommended to reuse the buffer.



Servicebio[®] Tris-Glycine SDS-PAGE Running Buffer (Powder)

Cat #: G2018-1L

Product Information

Product Name	Cat. No.	Spec.
Tris-Glycine SDS-PAGE Running Buffer (Powder)	G2018-1L	1 L
	G2018-15	15 bags, powder

Product Description/Introduction

Tris-Glycine SDS-PAGE Running Buffer (Powder) is a powder form of Tris-Glycine SDS-PAGE protein gel electrophoresis buffer. The powder is fine, dissolves quickly, and is easy to use. After reconstitution, it can be used in Tris-Glycine system protein gel electrophoresis. The main components are 25 mM Tris, 250 mM glycine, 0.1% SDS, pH 8.0-8.6@25℃.

Shipping Conditions

Ship and store at room temperature; Valid for 24 months.

Assay Protocol/Procedures

Each bag of this product can be used after it is fully dissolved in purified water and volume to 1000 mL.

Note

1. Please use as soon as possible after dissolving.

2. This electrophoresis buffer is only suitable for Tris-Glycine system protein gel electrophoresis, and can be used with G2003, G2037, G2041, G2042, G2043, G2044, G2045, G2060, G2061, G2062, G2063, G2064 3.To get better electrophoresis results, it is not recommended to reuse the buffer.



Servicebio® 10× Tris-glycine SDS-PAGE Running Buffer

Cat #: G2027

Product Information

Product Name	Cat. No.	Spec.
10× Tris-glycine SDS-PAGE Running Buffer	G2027-1L	1L

Product Description

This product is a 10-fold concentrated Tris- glycine SDS-PAGE buffer consisting of 250 mM Tris, 2.5 M glycine and 1% SDS, which should be diluted 10-fold before use. Mix 100 mL of this product with 900 mL of deionized or distilled water to obtain a working solution consisting mainly of 25 mM Tris, 250 mM glycine, 0.1% SDS, pH 8.0-8.6 @ 25°C. Suitable for protein gel electrophoresis in Tris-Glycine system.

Storage and Shipping Conditions

Ship and store at room temperature; Valid for 12 months.

Assay Protocol

Mix 100 mL of this product with 900 mL of deionized or distilled water to obtain a 1 x working solution contains 25 mM Tris, 250 mM glycine, 0.1% SDS, pH 8.0-8.6 at 25°C.

- 1. Use the working solution as soon as possible after preparation.
- 2. This electrophoresis solution is only suitable for protein gel electrophoresis in Tris-Glycine system, and can be adapted to our products G2003, G2037, G2041, G2042, G2043, G2044, G2045, G2060, G2061, G2062, G2063, G2064.
- 3. This product may have crystal precipitation in the case of low ambient temperature, this is a normal phenomenon, you can moderate heating, magnetic stirring to help dissolve, to be completely dissolved before dilution and use.
- 4. For better results, please do not reuse this product.
- 5. For your safty and health, please wear safety glasses, gloves, or protective clothing.



Servicebio[®] BTT Electrophoresis Buffer (25×)

Cat #: G2050-500ML

Product Information

Product Name	Cat. No.	Spec.
BTT Electrophoresis Buffer (25×)	G2050-500ML	500 mL

Product Description/Introduction

BTT Electrophoresis Buffer (25×) is 25 times concentrated Tris-MOPS SDS-PAGE electrophoresis buffer for Bis-Tris system protein gel electrophoresis. This buffer is used in Bis-Tris system protein gel electrophoresis with high resolution, short electrophoresis time and constant 200V electrophoresis. The main ingredients of the product are 50 mM Tris, 50 mM MOPS, 0.1% SDS, pH 7.25-7.85@25°C. It needs to be diluted 25 times to $1\times$ before use.

Storage and Shipping Conditions

Ship and store at room temperature, valid for 12 months.

Assay Protocol/Procedures

BTT electrophoresis buffer $(25 \times)$ diluted 25 times with pure water to a concentration of 1 x before high resolution color SDS-PAGE protein gel electrophoresis.

- It can be used with our PAGE high-resolution color (red/green) gel ultra-fast preparation kit series products (G2066, G2067, G2068, G2071, G2072, G2073) as well as Bis-Tris SwePAGE precast gels for SDS PAGE series products.
- 2. This electrophoresis buffer cannot be mixed with Tris-Glycine SDS PAGE electrophoresis buffer and is only suitable for Bis-Tris system protein gel electrophoresis, and cannot be applied to Tris-Glycine system protein gel electrophoresis.
- 3. Reuse of this electrophoresis buffer is not recommended.
- 4. This product may have crystal precipitation in the case of low ambient temperature, this is a normal phenomenon, can be moderately heated to help dissolve, to be completely dissolved before dilution and use.
- 5. For your safety or health, please wear safety glasses, gloves, or protective clothing.



Servicebio[®] Tris-MOPS SDS-PAGE Running Buffer (Powder)

Cat. #: G2051

Product Information

Product Name	Cat. No.	Spec.
Tris-MOPS SDS-PAGE Running Buffer (Powder)	G2051-1L	1L
	G2051-15	1 L, 15 bags

Product Description/Introduction

Tris-MOPS SDS-PAGE Running Buffer, fine powder, rapid dissolution, easy to use, formulated to dissolve for Bis-Tris system protein gel electrophoresis. This buffer is used in Bis-Tris system protein gel electrophoresis with high resolution, short electrophoresis time and constant 200V electrophoresis.

The main components of the product are 50 mM Tris, 50 mM MOPS and 0.1% SDS, and the pH is 7.25-7.85 @ 25℃.

Storage and Shipping Conditions

Ship and store at room temperature, valid for 24 months.

Assay Protocol/Procedures

- 1. Dissolve each bag of powder in 1 L of pure water, and stir to dissolve completely.
- 2. Run for 30 minutes at 200 V constant during electrophoresis. Reduce the voltage and extend the electrophoresis time if electrophoresis tanks with poor heat dispersion.

- It can be used with our PAGE high-resolution color (red/green) gel ultra-fast preparation kit series products (G2066, G2067, G2068, G2071, G2072, G2073) as well as Bis-Tris SwePAGE precast gels for SDS PAGE series products.
- 2. This electrophoresis buffer cannot be mixed with Tris-Glycine SDS PAGE electrophoresis buffer and is only suitable for Bis-Tris system protein gel electrophoresis, and cannot be applied to Tris-Glycine system protein gel electrophoresis.
- 3. Do not reuse the running buffer.
- 4. This product may crystallise at low temperatures. If crystals have formed in the running buffer, warm them gently until they have completely dissolved before dilution.
- 5. For your safety and health, please wear lab clothes and disposable gloves.



Servicebio[®] Tris-MES SDS-PAGE Running Buffer (Powder)

Cat. #: G2077

Product Information

Product Name	Cat. No.	Spec.
Tris-MES SDS-PAGE Running Buffer (Powder)	G2077-1L	1 L

Product Description

This product Tris-MES SDS-PAGE Running Buffer (Powder) that is Tris-MES SDS-PAGE protein gel electrophoresis buffer in the form of dry powder, this product is a fine powder, rapid dissolution, easy to use, after the preparation and dissolution of the protein gel electrophoresis applicable to Bis-Tris system. This buffer is used for Bis-Tris system protein gel electrophoresis with high resolution, short electrophoresis time and constant 200V electrophoresis. The main components of this product are 50 mM Tris, 50 mM MES, 0.1% SDS, pH 6.80-7.50 at 25°C.

Storage and Shipping Conditions

Ship and store at room temperature with a validity period of 36 months.

Assay Protocol

- 1. Dissolve each package of powder in 1 L of pure water, and stir to dissolve completely.
- 2. Run for 30 minutes at 200 V constant during electrophoresis. Reduce the voltage and extend the electrophoresis time if electrophoresis tanks with poor heat dispersion.

- 1. It can be used with our PAGE high-resolution color (red/green) gel ultra-fast preparation kit series products (G2066, G2067, G2068, G2071, G2072, G2073) as well as Bis-Tris SwePAGE precast gel series products.
- 2. This running buffer can not be mixed with Tris-Glycine running buffer, and is only suitable for Bis-Tris system gels and can not be applied to Tris-Glycine system gels.
- 3. Do not reuse the running buffer.
- 4. This product may crystallise at low temperatures. If crystals have formed in the running buffer, warm them gently until they have completely dissolved before dilution.
- 5. For your safety and health, please wear lab clothes and disposable gloves.



Servicebio® SWE Rapid High Resolution Running Buffer (Powder)

Cat #:G2081

Product Information

Product Name	Cat. No.	Spec.
SWE Rapid High Resolution Running Buffer (Powder)	G2081-1L	1 L
	G2081-15	1 L, 15 bags

Product Description/Introduction

The SWE Rapid High Resolution Running Bufferr (powder) is optimal to Tris-Glycine electrophoresis buffer for SDS-PAGE gel electrophoresis in Tris-Glycine. Compared with the traditional Tris-glycine running buffer, this product can be used for electrophoresis without adjusting the voltage according to the separation gel and the stacking gel, and it can be used for the whole process of electrophoresis at a constant voltage of 200-250 V. It takes about 30 min to complete the electrophoresis, which saves time and is more effective for the separation of small molecules. It can separate the 10 kDa and the 15 kDa bands in the prestained protein marker and clearly visible (gel concentration above 8%) to achieve rapid and efficient isolation of proteins.

Storage and Shipping Conditions

Ship and store at room temperature. Valid for 24 months.

Assay Protocol/Procedures

- 1. Each bag of electrophoresis buffer (powder) is dissolved in 1000 mL of purified water, and can be used after fully dissolved.
- 2. Selection of different protein gel concentrations for different protein molecular weights, refer to the table below:

SDS-PAGE Separation Gel Concentration	Optimum Separation Range (kDa) (SWE Rapid High Resolution Running Buffer)
6%	15-300
8%	10-250
10%	5-150
12%	3-100
15%	< 60

3. Constant voltage electrophoresis, 200-250 V, Refer to the following table for electrophoresis time:

Comparison Table of Electrophoresis Voltage and Electrophoresis Time		
Voltage(V) Estimated Electrophoresis Time(min)		
200	35	
220	30	
250	25	



- 1. It is recommended to use the working solution as soon as possible after preparation.
- 2. This product is suitable for conventional Tris-HCl system SDS-PAGE gels, such as our products **G2003**, **G2037**, **G2041**, **G2042**, **G2043**, **G2044**, **G2045**, **G2060**, **G2061**, **G2062**, **G2063**, **G2064**.
- 3. High voltage electrophoresis is easy to produce high heat. Please select the appropriate voltage for electrophoresis according to the ambient temperature.
- 4. The running solution can be reused for 2-3 times, more reuse is not recommended.
- 5. For your safty and health, please wear safety glasses, gloves, or protective clothing.



Servicebio® SWE Rapid High Resolution Running Buffer (Powder)

Cat #:G2081

Product Information

Product Name	Cat. No.	Spec.
CME Devid Link Developing Durging Duffer (Deviden)	G2081-1L	1 L
	G2081-15	1 L, 15 bags

Product Description/Introduction

The SWE Rapid High Resolution Running Bufferr (powder) is optimal to Tris-Glycine electrophoresis buffer for SDS-PAGE gel electrophoresis in Tris-Glycine. Compared with the traditional Tris-glycine running buffer, this product can be used for electrophoresis without adjusting the voltage according to the separation gel and the stacking gel, and it can be used for the whole process of electrophoresis at a constant voltage of 200-250 V. It takes about 30 min to complete the electrophoresis, which saves time and is more effective for the separation of small molecules. It can separate the 10 kDa and the 15 kDa bands in the prestained protein marker and clearly visible (gel concentration above 8%) to achieve rapid and efficient isolation of proteins.

Storage and Shipping Conditions

Ship and store at room temperature. Valid for 24 months.

Assay Protocol/Procedures

- 1. Each bag of electrophoresis buffer (powder) is dissolved in 1000 mL of purified water, and can be used after fully dissolved.
- 2. Selection of different protein gel concentrations for different protein molecular weights, refer to the table below:

SDS-PAGE Separation Gel Concentration	Optimum Separation Range (kDa) (SWE Rapid High Resolution Running Buffer)
6%	15-300
8%	10-250
10%	5-150
12%	3-100
15%	< 60

3. Constant voltage electrophoresis, 200-250 V, Refer to the following table for electrophoresis time:

Comparison Table of Electrophoresis Voltage and Electrophoresis Time		
Voltage(V) Estimated Electrophoresis Time(min)		
200	35	
220	30	
250	25	



- 1. It is recommended to use the working solution as soon as possible after preparation.
- 2. This product is suitable for conventional Tris-HCl system SDS-PAGE gels, such as our products **G2003**, **G2037**, **G2041**, **G2042**, **G2043**, **G2044**, **G2045**, **G2060**, **G2061**, **G2062**, **G2063**, **G2064**.
- 3. High voltage electrophoresis is easy to produce high heat. Please select the appropriate voltage for electrophoresis according to the ambient temperature.
- 4. The running solution can be reused for 2-3 times, more reuse is not recommended.
- 5. For your safty and health, please wear safety glasses, gloves, or protective clothing.



Servicebio[®] Tris-Acetate SDS-PAGE Running Buffer (Powder)

Cat. #:G2141-1L

Product Information

Product Name	Cat. No.	Spec.
Tris-Acetate SDS-PAGE Running Buffer	G2141-1L	1 L

Product Introduction

This product Tris-Acetate SDS-PAGE Running Buffer (Powder) that is Tris- Acetate SDS-PAGE protein gel electrophoresis buffer in the form of powder. This product is a fine powder, rapid dissolution, easy to use, after the preparation and dissolution of the Tris- Acetate system for protein gel electrophoresis. This buffer provides excellent separation of large molecular weight proteins when used for protein gel electrophoresis in the Tris- Acetate system. The main components of this product are 50 mM Tris, 50 mM Tricine, 0.1% SDS, pH 8.2-8.5@25℃。

Shipping and Storage Conditions

Ship and store at room temperature away from light, valid for 36 months

Assay Procedures

- 1. Dissolve each bag of powder in 1 L of pure water and stir to dissolve completely.
- 2. The electrophoresis voltage can be 150 V throughout, the electrophoresis time is about 60 min, and the whole process requires ice bath electrophoresis.

Note

- 1. Do not mix with other electrophoresis buffer, this product just for denaturing electrophoresis in Tris-Acetate gels.
- 2. This electrophoresis solution is not recommended for reuse.
- 3. The electrophoresis voltage can be adjusted as needed, and the electrophoresis time is shortened or lengthened accordingly.
- 4. For your safety and health, please wear appropriate protective clothing and gloves.

For research use only, not for use in diagnostic procedures! Version: V1.0-202303



Servicebio[®] Tricine SDS-PAGE Running Buffer (Powder)

Cat. #: G2142

Product Information

Product Name	Cat. No.	Spec.
Tricine SDS-PAGE Running Buffer (Powder)	G2142-1L	1 L

Product Introduction

This product Tricine SDS-PAGE Running Buffer (Powder) that is Tricine SDS-PAGE protein gel electrophoresis buffer in the form of powder, this product is a fine powder, rapid dissolution, easy to use, formulated to dissolve for Tricine system protein gel electrophoresis. Tricine gels are designed for the separation of low molecular weight proteins. In this buffer system, Tricine is used instead of glycine in the electrophoresis buffer to separate low molecular weight proteins more efficiently and improve the resolution of small molecular weight peptides. The main components of the product are 100 mM Tris, 100 mM Tricine, 0.1% SDS, pH 8.2-8.5@25°C.

Storage and Shipping Conditions

Ship and store at room temperature away from light, valid for 36 months.

Assay Procedures

- 1. Each package of powder should be dissolved in 1 L of pure water and stir until dissolved.
- 2. The electrophoresis voltage can be 150 V throughout, the electrophoresis time is about 60 min, and the whole process requires ice bath electrophoresis.

- 1. Do not mix with other electrophoresis buffer, this product just for denaturing electrophoresis in Tricine gels.
- 2. This electrophoresis solution is not recommended for reuse.
- 3. The electrophoretic voltage should not be too high, and electrophoretic heat production may result in unfavorable separation of small molecule proteins.
- 4. For your safety and health, please wear appropriate protective clothing and gloves.



Servicebio[®] Tris-Glycine Native-PAGE Running Buffer (Powder)

Cat. #: G2143

Product Information

Product Name	Cat. No.	Spec.
Tris-Glycine Native-PAGE Running Buffer (Powder)	G2143-1L	1 L

Product Introduction

Tris-Glycine Native Running Buffer (Powder) is designed for protein gel electrophoresis under native running conditions with Tris-Glycine gels or Tris-Acetate gels. Tris-Glycine gels do not contain SDS and does not the original charge properties of proteins, which are separated according to their own charge properties and molecular weight size.

The main ingredients of Tris-Glycine Native Running Buffer (Powder) are 25mM Tris Base, 192 mM Glycine at pH 8.3-8.9.

Storage and Shipping Conditions

Ship and store at room temperature away from light, valid for 36 months.

Assay Procedures

- 1. Each package of powder should be dissolved in 1 L of pure water and stir until dissolved.
- 2. The electrophoresis voltage can be 150 V throughout, the electrophoresis time is about 60 min, and the whole process requires ice bath electrophoresis.

- 1. Do not mix with other electrophoresis buffer, this product just for non-denaturing gel electrophoresis of proteins.
- 2. This electrophoresis solution is not recommended for reuse.
- 3. High-voltage electrophoresis is not recommended for nondenaturing gel electrophoresis of proteins, high heat production can trigger thermal denaturation of proteins.
- 4. For your safety and health, please wear appropriate protective clothing and gloves.



Servicebio[®] 1× Tris-Glycine SDS-PAGE Running Buffer

Cat #:G2144-1L

Product Information

	io. Spec.	
1× Tris-Glycine SDS-PAGE Running Buffer G214	-1L 1 L	

Product Description

 $1 \times$ Tris-Glycine SDS-PAGE Running Buffer is used for proteins electrophoresis on denaturing polyacrylamide gels. Tris-glycine gels provide reproducible separation of a wide of proteins into well-resolved bands.

This product is a fine powder that dissolves quickly and is easy to use.

This product consists of 25 mM Tris, 250 mM glycine, 0.1% SDS, pH 8.0-8.6 at 25°C.

Storage and Shipping Conditions

Ship and store at room temperature; Valid for 12 months.

Assay Protocol

Each package of electrophoresis buffer (dry powder) dissolved in 1000 mL of water.

- 1. Use quickly after dissolving.
- 2. Do not reuse for better electrophoresis results.



Servicebio® 1× SWE Rapid High Resolution Running Buffer (Ready to Use) Cat #:G2149-1L

Product Information

Product Name	Cat. No.	Spec.
1× SWE Rapid High Resolution Running Buffer (Ready to Use)	G2149-1L	1 L

Product Description

1× SWE Rapid High Resolution Running Buffer (Ready to Use) is optimal to Tris-Glycine electrophoresis buffer for SDS-PAGE gel electrophoresis in Tris-Glycine. Compared with the traditional Tris-glycine running buffer, this product can be used for electrophoresis without adjusting the voltage according to the separation gel and the stacking gel, and it can be used for the whole process of electrophoresis at a constant voltage of 200-250 V, it takes about 30 min to complete the electrophoresis, which saves time and is more effective for the separation of small molecules. It can separate the 10 kDa and the 15 kDa bands in the prestained protein marker and clearly visible (gel concentration above 8%) to achieve rapid and efficient separation of proteins.

Storage and Shipping Conditions

Ship and store at room temperature. Valid for 12 months.

Assay Protocol

- 1. Open the lid and pour it into the electrophoresis tank for use.
- 2. Selection of different protein gel concentrations for different protein molecular weights, refer to the table below:

SDS-PAGE Separation Gel Concentration	Optimum Separation Range (kDa) (SWE Rapid High Resolution Running Buffer)
6%	15-300
8%	10-250
10%	5-150
12%	3-100
15%	< 60

3. Constant voltage electrophoresis, 200-250 V, refer to the following table for electrophoresis time:

Comparison Table of Electrophoresis Voltage and Electrophoresis Time	
Voltage(V)	Estimated Electrophoresis Time(min)
200	35



220	30
250	25

- 1. It is recommended to use it as soon as possible after opening the lid.
- This product is suitable for conventional Tris-glycine system SDS-PAGE gels, such as our products G2003, G2037, G2041, G2042, G2043, G2044, G2045, G2060, G2061, G2062, G2063, G2064.
- 3. This product may have crystal precipitation in the case of low ambient temperature, this is a normal phenomenon, can be heated moderately to help dissolve, to be completely dissolved and cooled to room temperature before use.
- 4. High voltage electrophoresis is easy to produce high heat. Please select the appropriate voltage for electrophoresis according to the ambient temperature.
- 5. This electrophoresis solution can be reused 2-3 times, more times reuse is not recommended.
- 6. For your safty and health, please wear safety glasses, gloves, or protective clothing.



Servicebio® 5× SWE Rapid High Resolution Running Buffer

Cat #: G2152

Product Information

5× SWE Rapid High Resolution Running Buffer G2152-1L 1 L	

Product Description

The 5× SWE Rapid High Resolution Running Buffer is optimal to Tris-Glycine electrophoresis buffer for SDS-PAGE gel electrophoresis in Tris-Glycine. Compared with the traditional Tris-glycine running buffer, this product can be used for electrophoresis without adjusting the voltage according to the separation gel and the stacking gel, and it can be used for the whole process of electrophoresis at a constant voltage of 200-250 V, it takes about 30 min to complete the electrophoresis, which saves time and is more effective for the separation of small molecules. It can separate the small molecule protein bands in the prestained protein marker and clearly visible (gel concentration above 8%) to achieve rapid and efficient isolation of proteins. This product needs to be diluted 5 times before use.

Storage and Shipping Conditions

Ship and store at room temperature. Valid for 12 months.

Assay Protocol

- 1. Mix 100 mL of this product with 400 mL of deionised or distilled water to obtain 500 mL of 1 x working solution.
- 2. Selection of different protein gel concentrations for different protein molecular weights, refer to the table below:

SDS-PAGE Separation Gel Concentration	Optimum Separation Range (kDa) (SWE Rapid High Resolution Running Buffer)
6%	15-300
8%	10-250
10%	5-150
12%	3-100
15%	< 60

3. Constant voltage electrophoresis, 200-250 V, refer to the following table for electrophoresis time:

Comparison Table of Electrophoresis Voltage and Electrophoresis Time	
Voltage(V)	Estimated Electrophoresis Time(min)


200	35
220	30
250	25

Note

- 1. It is recommended to use it as soon as possible after opening the lid.
- This product is suitable for conventional Tris-HCl system SDS-PAGE gels, such as our products G2003, G2037, G2041, G2042, G2043, G2044, G2045, G2060, G2061, G2062, G2063, G2064.
- 3. This product may have crystal precipitation in the case of low ambient temperature, this is a normal phenomenon, can be heated moderately to help dissolve, to be completely dissolved and cooled to room temperature before use.
- 4. High voltage electrophoresis is easy to produce high heat. Please select the appropriate voltage for electrophoresis according to the ambient temperature.
- 5. The running solution can be reused for 2-3 times, more reuse is not recommended.
- 6. For your safety and health, please wear safety glasses, gloves, or protective clothing.



Servicebio[®] 5×Tris-Glycine SDS-PAGE Running Buffer

Cat #: G2162

Product Information

Product Name	Cat. No.	Spec.
5×Tris-Glycine SDS-PAGE Running Buffer	G2162-1L	1 L

Product Description/Introduction

This product is a 5x concentrated Tris-Glycine SDS-PAGE protein gel electrophoresis buffer. The main components are 125 mM Tris, 1.25 M glycine, and 0.5% SDS. It needs to be diluted 5 times before use. Take 200 mL of this product and mix thoroughly with 800 mL of deionized water or distilled water to obtain a working solution with the main components of 25 mM Tris, 250 mM glycine, 0.1% SDS, pH 8.0-8.6 at 25°C. It is suitable for Tris-Glycine system protein gel electrophoresis.

Storage and Shipping Conditions

Ship and store at room temperature; Valid for 12 months.

Assay Protocol/Procedures

Take 200 mL of this product and mix thoroughly with 800 mL of deionized water or distilled water to obtain a 1000 mL 1x working solution with 25 mM Tris, 250 mM glycine, 0.1% SDS, pH 8.0-8.6 at 25°C.

Note

- 1. Please use the solution as soon as possible after preparation.
- This electrophoresis buffer is only suitable for Tris-Glycine system protein gel electrophoresis and can be used with our company's products G2003, G2037, G2041, G2042, G2043, G2044, G2045, G2060, G2061, G2062, G2063, G2064.
- 3. Crystallization may occur at lower environmental temperatures, which is a normal phenomenon. It can be heated at 37°C and shaken several times until completely dissolved before dilution and use.
- 4. For better electrophoresis results, reuse is not recommended.

По вопросам продаж и поддержки обращайтесь:

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