One step PAGE Gel Fast Preparation Kit

Cat #: orb1566762, orb1566763, orb1566764, orb1566765, orb1566766 (manual)

Catalog Number	Product Name	MW Range for Separation	Size
orb1566766	6% Blocking-free PAGE gel ultra-fast preparation kit	70~300 kDa	125 pieces of 0.75 mm mini gel can be made/pack; 90 pieces of 1.00 mm mini gel can be made/pack; 60 pieces of 1.50 mm mini gel can be made/pack
orb1566765	8% Blocking-free PAGE gel ultra-fast preparation kit	30~200 kDa	
orb1566764	10% Blocking-free PAGE gel ultra-fast preparation kit	20~80 kDa	
orb1566763	12.5% Blocking-free PAGE gel ultra-fast preparation kit	15~60 kDa	
orb1566762	15% Blocking-free PAGE gel ultra-fast preparation kit	10~45 kDa	

Kit Contents

Component	Product Name
Concentrated gel solution (2×)	80 ml
Concentrated gel buffer (2×)	80 ml
Separation gel solution (2×)	250 ml
Separation gel buffer (2×)	250 ml
Modified ammonium persulfate solution	8 ml
Disposable preparation cup	50

Product Introduction

Blocking-free PAGE gel ultra-fast preparation kit is suitable for Tris-glycine electrophoresis system. It includes a full set of reagents required for PAGE gel preparation. You only need to prepare your own gel preparation equipment. No pure water blocking separation gel is required, and no additional addition of TEMED of odor can be used to prepare PAGE gel. This kit requires only one step of gel filling and is easy to operate. The concentrated tape prepared has colors (random colors), making it easy to load samples and distinguish gels from different samples. The modified ammonium persulfate in this kit is provided in solution form, which can ensure that the ammonium persulfate solution is stable for three months at 2-8°C. This kit does not contain SDS and is also suitable for non-denaturing PAGE gel electrophoresis.

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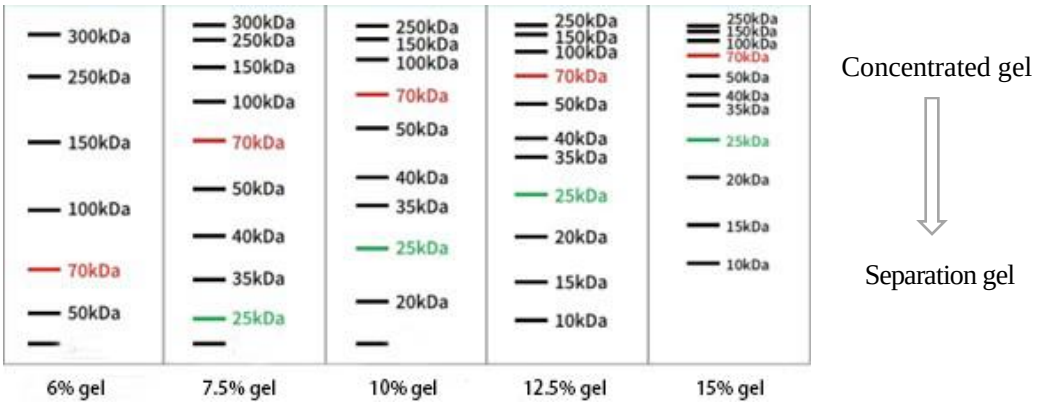

Figure 1. Reference Diagram of SDS-PAGE Protein Electrophoresis Migration in Tris- Glycine System (This figure is for reference only. The actual separation range will be different due to different factors such as temperature, pH and operation.)

Operation method (Take a piece of 0.75/1.00/1.50 mm thickness mini gel as an example)

Gel	Reagents	0.75mm	1.00mm	1.50mm
Separation gel	Separation gel solution (2×)	2.0 ml	2.7 ml	4.0 ml
	Separation gel buffer (2×)	2.0 ml	2.7 ml	4.0 ml
	Modified ammonium persulfate solution	40μl	54μl	80μl
Concentrated gel	Concentrated gel solution (2×)	0.5 ml	0.75 ml	1.0 ml
	Concentrated gel buffer (2×)	0.5 ml	0.75 ml	1.0 ml
	Modified ammonium persulfate solution	10μl	15μl	20μl

1. Assemble the gel mold according to the gel mold instruction.

2. Take an equal volume of the separation gel solution (2×) and the separation gel buffer (2×) according to the table and mix.

3. Take an equal volume of concentrated gel solution (2×) and concentrated gel buffer (2×) according to the table and mix.

4. According to the table, add the modified ammonium persulfate solution to the mixed separation gel solution in step 2 to prepare the separation gel mixed solution, gently stir and mix to avoid bubbles.

5. Fill the gel mold with a proper amount of the separation gel mixed solution so that the liquid level is about 1.5 cm away from the upper edge of the short glass plate.

6. According to the table, add the modified ammonium persulfate solution to the mixed concentrated gel solution in step 3, prepare the concentrated gel mixed solution, and gently stir and mix to avoid bubbles.

7. Do not wait for the separation gel to set, directly inject the concentrated gel mixed solution onto the separation gel solution slowly, and insert the comb into the gel slowly to avoid bubbles.

Note: After adding the separation gel, inject the concentrated gel into the gel mold within 2 minutes, and slowly inject the concentrated gel to prevent mixing the concentrated gel with the separation gel.

8. Allow room temperature to stand for about 15 minutes, wait for the concentrated gel to solidify, carefully pull out the comb, use the syringe needle or pipette tip to aspirate the electrophoresis buffer to flush the sample hole, and then perform the routine electrophoresis operation.

Storage conditions

Store in 2-8℃, the modified ammonium persulfate solution that needs long-term storage should be dispensed and stored in -20℃ to avoid repeated freezing and thawing. Valid for 1 year.

Precautions

1. The agglomeration rate of PAGE gel was positively correlated with the temperature and the amount of ammonium persulfate. The higher the temperature was, the higher the amount of ammonium persulfate was, the faster the agglomeration rate of PAGE gel was. Too fast gel polymerization is not conducive to operation and there is the possibility of bubble generation. Therefore, the polymerization rate of PAGE gel can be properly adjusted by changing the amount of ammonium persulfate in different room temperature environments. When the room temperature is low in winter, the dosage of ammonium persulfate can be increased appropriately, or the gel time can be prolonged.
2. Before dispensing, please take this testing kit out of the refrigerator and place it at room temperature, which can effectively reduce the generation of bubbles in the gel caused by liquid dissolved gas not being discharged in time.
3. Before dispensing, make sure the assembled gel mold is free of liquid leakage. Poor fit of the glass plate or mismatch of the comb may lead to concentrated gel shrinkage.
4. Clarity and straightness of protein bands are related to electrophoresis conditions. If clearer and straighter protein bands are required, it is recommended that the voltage be between 100 -120 V for electrophoresis and increase to 150 V for faster electrophoresis.
5. An alternative to TEMED has been added to this product and if further gel acceleration is required, the appropriate amount of TEMED may be added at the time of formulation.
6. The concentrated gel buffer (2×) contains dye. Due to the nature of the dye, precipitation will occur after standing for a long time. Please mix gently before use.
7. This product gel speed is fast, do not need to put the gel mold in the 37℃ oven or air conditioning hot tuyere, normal room temperature conditions can be prepared.
8. If the glass plate and the comb do not match, there is a gap between the glass plate and the comb in the process of concentrated gelation, which will lead to gel residue in the gel hole after the comb is pulled out. Therefore, please select the matching gel making die. If unavoidable, flush the hole with the syringe needle or pipette tip.
9. For your safety and health, wear a lab coat and disposable gloves.

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