EXREsolve Precast 4-12% PAGE Gel, 15 Wells

Catalog Number: EXBR011

For Research Use Only. Not Intended for Diagnostic or Therapeutic Use.

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Product Description

Exreprotein™ EXREsolve Precast 4-12% PAGE Gel kits are polyacrylamide gels optimized for protein separation. They are available in formats with either 12 wells or 15 wells. The 12-well gels have a maximum capacity of 50 µL per well, with a recommended loading volume of 25 µL or less. The 15-well gels have a maximum capacity of 30 µL per well, with a recommended loading volume of 15 µL or less. The Instant MOPS Buffer included in the kit simplifies buffer preparation and ensures the correct buffer is available for electrophoresis.

The gel formulation, manufacturing, and cassette design provide convenience with excellent repeatability, stability and reduced protein modification. The unique formulation produces clear and sharp bands with enhanced uniformity and superior resolution.

Limitations

- For Research Use Only. Not Intended for Diagnostic or Therapeutic Use.

Precautions

- This package insert must be read in its entirety before using this product.
- DO NOT use Tris-glycine running buffer with this EXREsolve Precast 4-12% Gel kit.
- The gasket on some gel tanks may need to be reversed to prevent leakage, see instructions below.
- Always wear appropriate protective clothing and follow safe laboratory procedures.

Materials Provided & Storage

Store the kit at 2-8˚C for up to 12 months**. Protect from light.**

Component	Size	Quantity
Precast SDS-PAGE Gel 4-12%, 15 Wells	15 wells/gel	10 gels
Instant MOPS Buffer Powder	1 Packet (prepares 1L buffer)	2 Packets

Preparation of Reagents

1. **MOPS Buffer**: Transfer instant powder granules from 1 packet of Instant MOPS Buffer to a beaker. Pre-dissolve the granules by adding 500 mL deionized water to the beaker, allowing the 1-5 minutes for the granules to completely dissolve. Transfer the dissolved solution to a volumetric flask and bring up the volume to 1000 mL by adding deionized water.
2. **Sample Preparation**: Prepare electrophoresis samples to a **total volume of 10 µL** according to the following table.

Component	Volume (µL)
Protein sample	x
Protein loading buffer 5X (EXREprotein Catalog # EXBR027 recommended)	2
Deionized water	8 – x (subtract protein sample volume, x)
Total Volume of Components	10

1. Remove the Precast SDS-PAGE Gel from the packaging and peel off the adhesive sealing tape at the bottom of the gel cassette assembly.
2. Using both hands, gently push out the comb (see Figure 1).
3. Insert the gel cassette into the gel electrophoresis apparatus, according to the manufacturer's instructions.
   Note: See Figure 2 below for recommendations on gasket positioning in certain electrode assemblies.
4. To the inner tank, add sufficient 1X MOPS Buffer to cover the sample wells.
5. To the outer tank, add 1X MOPS Buffer to the bottom of the sample wells to ensure proper cooling.
6. Slowly load the samples into the loading wells with the loading tip inserted vertically into the loading well.
7. The recommended voltage for electrophoresis is 160V, with the optimal range of 140-160V. We do not recommend exceeding 180V.
8. Run the electrophoresis until the dye front reaches the bottom of the gel. While the typical time at the recommended voltage is 20-30 minutes; it may vary due to temperature and size of proteins.
9. Upon completion of electrophoresis, remove the gel cassette from the tank and carefully remove the gel from the cassette by separating the plates according to the following method (see Figure 3).

Figure 1. Preparing Precast gel

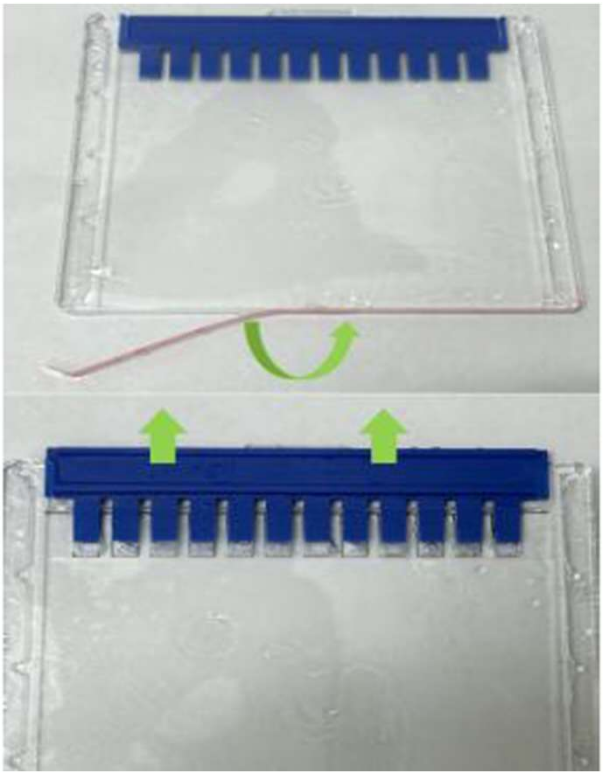

Figure 2. Certain raised electrophoresis tanks may require the silicon seal to be flipped over and reseated in the frame groove with the flat side facing upward.

Figure 3. Removing the plates from the gel.