

★ Storage

Store at 4 °C.

★ Contents

- Product manual
- Fine-gel SDS-PAGE Gel Solution

ALL PRODUCTS SOLD BY GenDEPOT ARE INTENDED FOR RESEARCH USE ONLY UNLESS OTHERWISE INDICATED. THIS PRODUCT IS NOT INTENDED FOR DIAGNOSTIC OR DRUG PURPOSE

★ Shipping Condition

Ship with ice pack.

★ Introduction

Fine-gel SDS-PAGE Gel Solution is a TEMED free, ready-to-pour premixed solution of acrylamide, bisacrylamide, buffer, and SDS that enables ultra-fine resolution of protein bands by denaturing PAGE. This novel formulation requires only the addition of APS and allows separation of a wide range of proteins from 10kDa to 240 kDa on the same mini-gel with less prep work than traditional SDS-PAGE. This product provides a resolution superior to a gradient gel and a significant time savings, with no need to weigh hazardous acrylamide powder or pour stacking gel separately. The gel is compatible with post-electrophoresis applications such as Western blotting, MALDI analysis, protein sequencing and other downstream applications. It is also suitable for staining with all commonly used dyes such as Coomassie Brilliant Blue, silver stain and fluorescent dyes.

★ Reagents

Provided by supplier

Fine-gel SDS-PAGE Gel Solution, Broad range

Fine-gel Running buffer(10X), 500ml

This buffer is supplied separately. See related products.

Provided by user

Ammonium Persulfate (APS)

Sample Loading buffer

★ Precaution

This product contains acrylamide that is a potent, cumulative neurotoxin and absorbed through the skin. When working with this solution, always wear suitable lab coat, disposable gloves, and protective goggles.

★ Related Product

The procedure is carried out at room temperature, unless stated otherwise.

1. Prepare gel solution

- Determine the volume of the gel mold (This information is usually provided by the manufacturer). Pour the appropriate volume of Fine-gel SDS-PAGE Gel Solution into a conical tube. Add 50-100 ul of 10% Ammonium Persulfate per 10 ml of Fine-gel SDS PAGE Gel Solution.

Note: The required amount of 10% Ammonium Persulfate depends on temperature. If temperature is higher than 25 °C, add 50ul of 10% Ammonium Persulfate per 10ml of Fine-gel SDS-PAGE Gel Solution. If temperature is lower than 25 °C, increase the amount of 10% Ammonium Persulfate by 2 times to save time during polymerization.

- Tightly cap the tube and gently invert the solution to mix (DO NOT VORTEX). Pour the solution between the glass plates, gel is not needed. To get a better resolution, we recommend using Fine-gel Stacking gel.

Note: Fine-gel SDS-PAGE Gel Solution with Fine-gel Running buffer is designed not to use stacking gel. But if necessary, use Fine-gel Stacking gel.

- Immediately insert clean comb, being careful to avoid trapping air bubbles.

Place the gel to polymerize completely at RT, about 15 min to 1 hr.

- After polymerization is complete, remove the comb carefully and rinse wells with water or running buffer to remove unpolymerized acrylamide and residual gel pieces.

- Assemble gel system and add sufficient 1 x Fine-gel Running buffer diluted from the supplied 10X stock to the top and bottom reservoirs. For the best resolution, use the Fine-gel Running buffer.

2. Sample preparation

- Dilute 1 part Laemmli sample buffer (4X) with 3 parts sample.

- Boil 3-5 min in water bath and cool on ice.

- Briefly Centrifuge the tube and load.

3. Electrophoresis

- Run gel at 100V for 60 min or until tracking dye reaches bottom of the resolving gel.

- Disassemble the apparatus and remove gel carefully from the plates.

- Proceed with protein detection or transfer.