

SDS-PAGE

Aim of the experiment

The purpose of this experiment is to analyze protein samples by SDS-PAGE.

Materials

- SurePAGE™, Bis-Tris, 10x8, 4-20%, 12 wells
- eStain™ L1 Protein Stainer
- Gel imager
- RealBand 3-color High Range Protein Marker
- SDS-PAGE Loading Buffer, 4× (with DTT)
- Tris-MOPS-SDS running buffer:

Reagent	Quality
Tris base	6.06 g
MOPS	10.46 g
SDS	1.0 g
EDTA	0.3 g
Deionized water	To 1000 ml

Procedure

1. Add 10 µl loading buffer to every 30 µl protein sample and mix well.
 2. Heat at 100°C for 5-10 minutes to denature the protein.
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3. Leak detection: erect the precast gel, add water and let it stand to check for leakage.
 4. Set up the device: Put the preformed gel into the device, pull out the comb, and add Tris-MOPS-SDS running buffer.
 5. Sample loading: Load the protein Marker and the sample sequentially.
 6. Running gel: close the lid and pay attention to the electrode correspondence. Conditions: 200V 20min.
 7. Dyeing: After running the gel, carefully pry open the two pieces of glass with a corner cutting board, and use eStain TM L1 protein staining instrument to stain and decolor Coomassie brilliant blue gel.
 8. Finally, use the gel imager to check the result.
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