

Laboratory Procedure

Preparing a Visual Test Solution for 5 – 50 kDa Membranes

Equipment

- Measuring cylinder
- 1,000 ml beaker
- 1,000 ml media bottle
- 100 ml media bottle or Sterilin flask
- Sartolab RF-1000 filter
- Vacuum pump
- Top pan balance accurate to 0.01 g
- Magnetic stirrer and PTFE coated followers
- 1 ml pipette

Reagents

- Deionized water
- Bovine serum albumin fraction V (Sigma A-3059)
- Bromphenol blue dye (Sigma B-8026)

Protocol

0.2% Dye concentrate

1. Add 0.2 g bromphenol blue to 100 ml deionized water in a 100 ml bottle or Sterilin flask
2. Stir until fully dissolved
3. Store at room temperature

Protein Test Solution

1. Add 0.5 g BSA to 1,000 ml deionized water in a beaker
2. Stir until fully dissolved
3. Add 1 ml of dye concentrate while stirring
4. Continue to stir for at least 10 minutes so that the dye can fully bind to the protein
5. Filter the test solution through Sartolab RF-1000 fitted to a 1,000 ml media bottle
6. Store for up to 1 week at +4° C