



شرکت سلول بافت زیست (سبز)

Protein Concentration Detection with Lawry Method

1. Prepare a range of different concentrations of bovine serum albumin (BSA) (40, 80, 120, 160, 180, 200, 250, 300, 400, 500 $\mu\text{g/ml}$).
2. Add 0.5 ml of Blank (distilled water), BSA standards or samples in duplicate to labeled tubes.
3. Add 2.5 ml of ACR solution and vortex.
4. Incubate for 10 minutes at room temperature (25 °C).
5. Add 250 μl of Folin-Ciocalteu reagent (diluted 1:1 with distilled water) to the tubes and vortex.
6. Incubate for 30 minutes at room temperature (25 °C).
7. Read the OD at 660 nm.

Alkaline Cupper Regent (ACR):

- 0.5 ml of $\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$ 1% (1g/100ml)
- 0.5 ml of $\text{NaKC}_2\text{O}_6 + 4 \text{H}_2\text{O}$ 2% (2g/100ml)
- 50 ml of Na_2CO_3 2% (2g/100ml)

Note:

- Prepare BSA standards fresh.
- Shake the tubes to homogenize the suspension before OD detection.
- Mix the three components of ACR reagent just before use.
- Dilute Folin-Ciocalteu with water just before use.