

Protein Concentration Measurement

A280 Method

Direct, fast, needs pure protein. ϵ calculated from Trp/Tyr content.

$$c = A_{280} / \epsilon$$

Bradford Assay

Coomassie dye binding. A_{595} . Sensitive (1-100 $\mu\text{g/mL}$). Detergent interference.

BCA Assay

Cu^{2+} reduction. A_{562} . Compatible with detergents. 20-2000 $\mu\text{g/mL}$.

⚠ Interference Factors

DTT, β -ME affect BCA. SDS affects Bradford. Buffer composition critical.