PROTEIN CONCENTRATION DETERMINATION USING BCA PROCEDURE

Lan Zhou 11/12/02; Updated by Hanli Fan 2/2/06

REAGENTS:

PIERCE/Fisher Scientific: BCA Protein assay kit, Product# 23226 or similar products.

BSA Standard Stock: lug/ul (**Note**: you can use the **NEB**'s BSA control for restriction enzymes).

BCA Protein Assay Procedure

- 1) Add 2ul samples (e.g., from 100ul lysate of one well from 12- or 24-well plates) or BSA Standard (0ug, 1ug, 2ug, 3ug, 4ug, 8ug BSA) to 1.5ml sample tubes.
- 2) Mix 50 parts BCA reagent A with 1 part reagent B (**Note**: you will need 500ul per assay).
- 3) Add 500ul to each sample tube.
- 4) Mix and incubate for 15 minutes @ 60°C (**Note**: Incubation Temp and/or Time may vary, e.g., 37C to 60C and 15min to 30min, depending on protein concentrations. We recommend using 15min x 60C).
- 5) Cool down to RT.
- 6) Read OD @ 562nm, using "BCA reagent only" tube (i.e., no protein) as Blank, with disposable 1.0ml microcuvettes (min. vol. >300ul) (Note: You may also use ddH2O tube for balance and set sample buffer tube as reagent control).

Link to Hanli's Magic Protein Concentration Calculation Page