



GENERAL PROTOCOL FOR UNCONJUGATED GOLD PROBES

SPI Supplies
206 Garfield Avenue,
West Chester, PA 19380, USA

SPI-Mark™ Unconjugated Colloidal Gold Probes

Typical protocol for the conjugation of gold particles to a protein

Sample protocol for conjugation:

1. Clean all glassware (most important!).
2. Prepare aqueous protein solution at 0.1mg/ml.
3. Adjust SPI-Mark colloidal gold suspension pH > isoelectric point of protein.
4. Add enough protein (determined by titration) to stabilize the gold colloid. [SPI-Mark Silver Enhancement Kit](#) is required for 2nm and sometimes for 5 nm.
5. Add BSA to a concentration of 0.1%.
6. Centrifuge to concentrate and remove excess protein.
7. Centrifuge over a glycerol gradient to remove clusters.
8. Pool fractions and dilute to 30mg/ml protein in a suitable buffer for storage.

Revised: EER
11/15