

Bradford Protein Assay Kit

Catalog No.: K002

Size: 500 T/2500T

Storage: Store at room temperature for one year except for BSA at -20°C.

Kit Contents:

	Extraction Times	500T	2500T	Storage
I	Working Reagent	100 ml	500 ml	RT
II	BSA(5 mg/ml)	2 ml	10 ml	-20°C

Introduction

The Bradford assay relies on the binding of staining Coomassie Blue G250 to protein in acid medium and the complexing exhibiting a maximum absorbance at 595 nm that is nearly linear with increasing protein concentrations over a wide working range. According to highly sensitivity and simple to use, the Bradford protein assay is adopted by laboratories and companies, and becomes one of the prior protein quantitative methods as well as the BCA assay.

The Fine Bradford Protein Assay Kit has the characteristics of high sensitivity, light background and significant color difference, and the measured of protein in low concentration can be intuitive and convenient.

Procedure

1. 96-Microplate Procedure

- (1) Prepare the Standard Reagent. Dilute the 5 mg/ml BSA Standard into lateral concentrations of 0, 0.25, 0.5, 0.75,
- 1, 1.5 mg/ml. The BSA dilutions can be frozen and stored at -20° C, and thawed and warmed to room temperature when used.
- (2) Mark the wells with Standard or Test. Add at least $10 \mu l$ of the diluted Standard Reagent to each Standard well and add equal volume of testing samples each Test well.
- (3) Add all the wells with 200 μ l Working Reagent and waggle slightly for mixing.
- (4) Measure the absorbance at 595 nm on a plate reader. Subtract the average absorbance reading of at least 3 blank wells. Draw a standard curve by plotting absorbance reading for each BSA standard versus its concentration. Use the standard curve to determine the protein concentration of each unknown sample.

2. Test Tube Procedure



- (1) Prepare the Standard Reagent. Dilute the 5 mg/ml BSA Standard into lateral concentrations of 0, 0.25, 0.5, 0.75,
- 1, 1.5 mg/ml. The BSA dilutions can be frozen and stored at -20° C, and thawed and warmed to room temperature when used.
- (2) Mark the tubes with Standard or Test. Add at least 30 µl of the diluted Standard Reagent to each Standard tube and add equal volume of testing samples each Test tube.
- (3) Add all the tubes with 1 ml Working Reagent and waggle slightly for mixing.
- (4) Measure the absorbance at 595 nm with a spectrophotometer. Subtract the average absorbance reading of at least 3 blank tubes. Draw a standard curve by plotting absorbance reading for each BSA standard versus its concentration. Use the standard curve to determine the protein concentration of each unknown sample.

Additional Testing Information

Using the same protein with known concentration to prepare Standard Reagent can enhance the accuracy of concentration determining, e.g. determine the concentration of serum protein with Standard Reagent of BSA, or determine the concentration of antibodies with Standard Reagent of IgG.

Note:

- 1. Although reagents stored at 4°C rarely precipitate, a small amount of precipitation is acceptable and can be resolved by reversing the container.
- 2. Reagents of Bradford testing is highly acid. Please wear lab coat and gloves during assays for safety considerations.
- 3. Fine Bradford Protein Assay Kit is intolerant with detergent reagents. If detergent reagents are inevitable, FineTest product- Fine BCA Protein Assay Kit is available(K001).

