

Bradford Protein Assay Kit (1000 Assays)

Catalog# TBS2005

Bradford Colorimetric Protein Determination at 595 nm

DESCRIPTION

Tribioscience's Bradford Protein Assay kit is a simple, direct and accurate assay for measuring protein concentration based on Bradford Coomassie Blue method. In acidic condition, protein-binding causes the dye to change from reddish-brown to bright blue (absorption maximum equals 595nm), and the intensity of color is directly proportional to the protein concentration in the sample.

KEY FEATURES

- **Sensitive and accurate.** Use 5 µL samples. Detection linear range 0.005 – 1.5 mg /mL protein in 96-well plate assay.
- **Simple and high-throughput.** Only add reagent into sample procedure that can be readily automated as a high-throughput assay in 96-well plates for thousands of samples per day.
- **Versatility:** assays can be executed in 96-well plate or cuvette.

APPLICATIONS

Direct Assays: total protein concentration.

KIT CONTENTS

Assay Reagent: 50 mL (5 x concentrate).

Protein standard: 0.125, 0.25, 0.5, 0.75, 1.0 and 1.5 mg/mL BSA.

Storage conditions: The kit is shipped with blue ice. Store the reagent at 4°C and standard at -20°C, respectively. Shelf life: 12 months after receipt.

PROCEDURES

Reagent Preparation:

Prepare enough working reagent for each reaction well (200uL/well) by adding 1 vol of the 5 x Reagent to 4 vol of distilled water (all reagent should be at room temperature before testing).

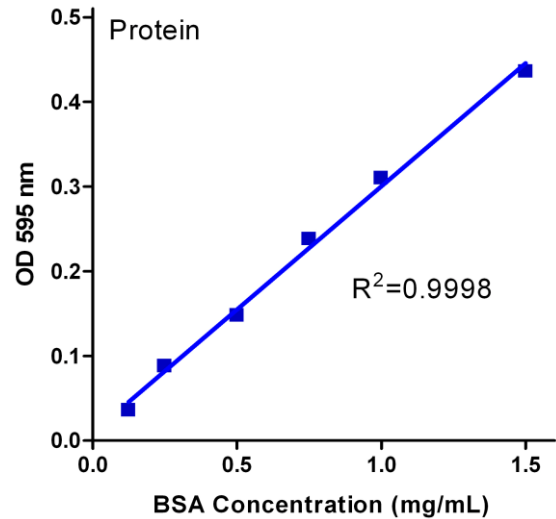
Procedure using 96-well plate:

1. Transfer 5 µL protein Standards or sample in duplicate to wells of a clear flat-bottom 96-well plate.
2. Add 200 µL working reagent and tap lightly to mix.
3. Measure OD at 570-630nm (peak 595nm).

CALCULATION

Subtract blank OD (water) from the standard OD values and plot the OD against standard concentrations. Use the standard curve to determine the sample protein concentration. Fig 1 is a reference standard curve.

Fig. 1 BSA Standard Curve



MATERIALS REQUIRED, BUT NOT PROVIDED

- Pipetting devices and accessories.
- Clear flat-bottom 96-well plates (e.g. Corning Costar).
- Plate reader for 96-well plate.

GENERAL CONSIDERATIONS

If protein concentration is > 1.5 mg/mL, dilute samples in distilled water, and sample OD values should be within the range of calibration curve to calculate the sample protein concentration. Reading can be performed as soon as the reagent and sample are mixed.

RELATED PRODUCTS

- PBS (TBS5003)
- Universal Block Buffer (TBS5013)
- Protein Loading Buffer (TBS5014)
- RIPA Lysis Buffer (TBS5017)
- 2% BSA in TBST (TBS5049-2)
- 5% BSA in TBST (TBS5049-5)
- 10% BSA in PBS (TBS5087)
- 0.1% BSA ELISA Assay Buffer (TBS5057)
- Urea Solution (TBS5037)
- Ammonium Sulfate Solution (TBS5038)
- MOPS Buffer (TBS5041)

For research use only.