

Bradford Reagent 1x

Ordering info

TBR0303-250, Bradford Reagent 1x, 250 mL

Description

Bradford Reagent is a known reagent used in Bradford assay. It is the mostly used colorimetric assay to determine the concentration of proteins. The procedure is based on the formation of a complex between the dye Brilliant Blue G and protein in a solution at acidic pH. The colorimetric reaction depends on the content of aromatic and basic amino acids. The protein-dye complex causes a shift in the maximum absorption of the dye from 465 to 595 nm. Absorbance increase is proportional to the amount of protein.

The protein concentration of an unknown sample can be determined using a calibration curve. To create the curve, it is recommended to use BSA (bovine serum albumin) as standard.

Features

- Ready to use solution.
- Fast assay procedure.
- Very sensitive assay.
- Stable dye-protein complexes.
- Assay compatible with the presence of reducing agents.
- Compatible with low concentration of detergents.

Applications

- Protein quantitation.
- Normalizing protein amounts for Western and enzymatic assays.

Storage

Store at 2-8°C. Protect from light.

Material needed (not supplied)

- 1.5 mL tubes.
- Plastic cuvettes or microtiter plate.
- BSA Standard (1 mg/mL).
- Bi-distilled Water.

Quality Control

Functionally tested.

Also available:

Acrylamide/ Bisacrylamide Solution (30%, 37,5:1)
(TBR0135, TBR0136)

TEMED (TBR0139)

Ammonium Persulfate (TBR0140, TBR0141)

Laemmli Buffer 4x (TBB0392, TBB0393)

PROTOCOL

A. PREPARATION OF STANDARDS AND SAMPLES

Equilibrate Bradford Reagent 1x to room temperature and mix the reagent by inversion several time before use it.

1. Prepare the calibration curve, in triplicate, attending at:

c (BSA) µg	V (BSA Standard, 0.9 mg/ mL) µL	V (Bradford) µL
0	0	1000
0.9	1	999
3.6	4	996
7.2	8	992
10.8	12	988
14.4	16	984
16.2	18	982

2. Also in triplicate, prepare the samples adding **20 µL of each one** in 1.5 mL tubes and the blank.
The protein concentration of the samples must be within the range of the calibration curve. If the concentration is higher, the analysis must be repeated with a sample dilution.
3. Add 1 mL per tube of Bradford Reagent 1x.
4. Vortex the tubes and incubate them 5-15 minutes at room temperature.
5. Transfer the reaction to spectrophotometric plastic cuvettes and read at 595 nm in a time frame of 30 minutes.

B. ANALYSIS

1. To determine protein concentration, create a calibration curve. Protein determination is made with the sample absorbance values and the regression equation of reference values. The data below is an example but it should not be used as replacement of your experimental calibration curve.

