



Bradford Reagent

Biochemical Research

Brief Description:

The assay is based on the observation that the absorbance maximum for an acidic solution of Coomassie Brilliant Blue G-250 shifts from 465 nm to 595 nm when binding to protein occurs. Both hydrophobic and ionic interactions stabilize the anionic form of the dye, causing a visible color change. The assay is useful since the extinction coefficient of a dye-albumin complex solution is constant over a 10-fold concentration range.

The Bradford assay is very fast and uses about the same amount of protein as the Lowry assay. It is fairly accurate and samples that are out of range can be retested within minutes. The Bradford is recommended for general use, especially for determining protein content of cell fractions and assessing protein concentrations for gel electrophoresis.

Catalogue Number:	MP022
Packing Size:	50 mL
Formulation:	5 X
Storage:	4-8°C

Experimental Procedures:

- Preparation of Standard working solution (SWR): Dilute Bradford Solution, 5X with 4 parts of deionized water to make the working solution.
Note: The stock solutions are stable. The working solution has to be prepared freshly prior to use.
- Prepare protein standards containing 0.2, 0.5, 1, 2, 5, 10mg/mL BSA. Prepare a standard curve of absorbance versus micrograms protein (*vice versa*).
- Prepare samples within the range of 0.2 to 10 mg/mL.
- Add 1 mL working solution to each 4 microliters sample and mix. Incubate 5 minutes at RT.
- Read at 595 nm. Color will be stable for at least one hour.
- Determine concentrations of original samples from the standard curve.

Notes:

The assay has to be finished in 30 minutes after mixing the working solution and samples.



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