

Easy Protein Quantitative Kit (Bradford)

Cat. No. DQ101

Storage: Coomassie brilliant blue solution at 2-8°C in dark for two years; BSA Standard Solution at -20°C for two years

Description

Easy Protein Quantitative Kit is a ready-to-use modified Bradford Coomassie-binding, colorimetric method for protein quantification. Under acidic condition, Coomassie Brilliant Blue G-250 binds to proteins providing an immediate shift in absorption maximum from 465 nm to 596 nm and a color change from brown to blue.

Measurement Range

total protein concentration of 50-1000 µg/ml

Kit Contents

| | |
|------------------------------------|--------|
| Coomassie Brilliant Blue Solution | 100 ml |
| BSA Standard Solution (0.22 mg/ml) | 4×1 ml |

Procedures

1. Prior to use, equilibrate Coomassie Brilliant Blue Solution to room temperature and gently invert to mix well.
2. Transfer 0, 10, 30, 50, 70, 90, 100 µl of BSA Standard Solution (0.22 mg/ml) into seven of 1.5 ml microfuge tubes, and add H₂O to a final volume of 100 µl.
3. Transfer protein sample into a new 1.5 ml microfuge tube, and add H₂O to a final volume of 100 µl.
4. Pipette 1.0 ml Coomassie Brilliant Blue Solution into each tube, mix thoroughly and incubate at room temperature for 5-10 minutes.
5. Measure the absorbance at 595 nm by spectrophotometer and record the value. Use the absorbance of sample without BSA as a blank control.
6. Plot the standard curve and calculate protein concentration in sample. Dilute the sample and re-measure it if the protein concentration falls out of the range of the standard curve.
7. The above procedures can be performed with microtiter-plate with 1/10 of the original volume.

Notes

- Coomassie Brilliant Blue G-250 can strongly bind to quartz cuvette, we recommend to use glass or plastic cuvettes.
- Measurement should be performed from low to high concentration. Do not wash cuvette during this procedure.
- The maximum of color shift occurs during 5-10 minutes after adding Coomassie brilliant blue. The most reliable data should be obtained during this time period.
- Use duplicate or triplicate data for the standard curve.

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