Coomassie (Bradford) Protein Assay Kit

Cat No.: PC0015

Size: 100mL/500mL

Storage: Seal preservation after opening, this kit from the date of order valid for nine months.

Description

Coomassie G-250 dye is a colorimetric reagent used for the detection and quantitation of total protein. In an acidic medium Coomassie dye binds protein causing an immediate shift in absorption maximum from 465nm to 595nm with a concomitant color change from green to blue. In a certain concentration range, the absorbance value A595 measured is in direct proportion to the protein concentration.

Protocol

- **Microplate Reader**

1. Completely dissolve BSA standard, dilute 10ul to 250ul, the final concentration of 0.2mg/ml. Dilution buffer was depend on the measured protein sample. For the sake of simplicity, suggested to use 0.9%NaCl or PBS.
2. 5×G250 mix well before use. 1ml 5×G250 diluted with 4ml ddH2O. 1×G250 solution can save one week at 4℃.
3. The standard according to 0, 2, 4, 6, 8, 12, 16, 20ul respectively added to 96well plates, add PBS dilution to complement 20ul.
4. Dilute the sample(prepare a few gradients, such as 2 times, 4 times, 8 times dilution), add 20ul sample to 96 well plate.
   To avoid errors, sample points need set after the standard line of 1/2.
5. Add 200ul diluted 1×G250 to each well, room temperature for 3-5 minutes.
6. Determination of absorbance.
7. According to the standard curve calculate the sample protein concentration.

- **UV-Vis Spectrophotometer**

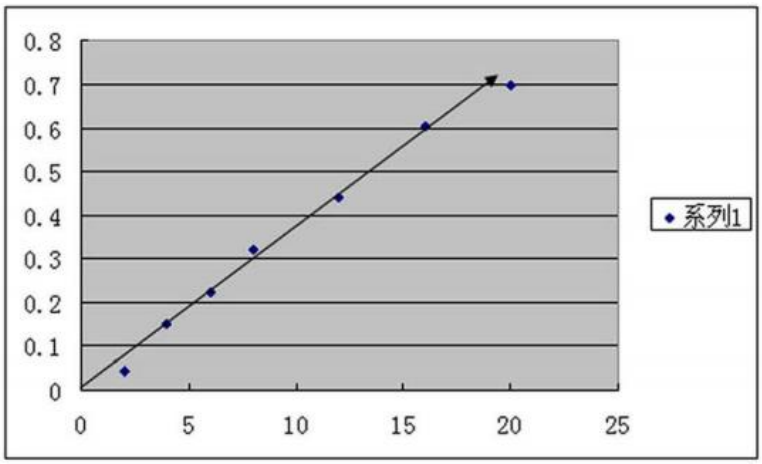
1. 8*10ml centrifuge tube(or more) and labeled with 1~8.
2. Dilute 100ul BSA with 2.4ml PBS to 0.2mg/ml.
3. 5×G250 mix well before use. 1ml 5×G250 diluted with 4ml ddH2O. 1×G250 solution can save one week at 4℃.
4. Add reagents according to the following table (each well 5ml, the extra is used to clean the cuvette)

Tube	1	2	3	4	5	6	7(sample 1)	8(sample 2)	9(sample 3)
BSA	0ul	100ul	200ul	300ul	400ul	500ul	500ul diluted sample 1	500ul diluted sample 2	……

PBS	500ul	400ul	300ul	200ul	100ul	0ul	0ul	0ul	0ul
1×G250	5ml	5ml	5ml	5ml	5ml	5ml	5ml	5ml	5ml

5. Measure OD value after 3 minutes reaction. In order to ensure the accuracy of the experiment, measure OD value every 2 minutes

Tube	1	2	3	4	5	6	7	8	……
Stain Solution(min)	0	2	4	6	8	10	12	14	……
OD value	3	5	7	9	11	13	15	17	……



Bio-rad 680，A570nm, room temperature for 3 minutes

Related Products:

PC0001 Protein standard solution (5mg/ml BSA)
PC0021 BCA Reagent
PC0030 Lowry Protein Assay Kit
PC0020 BCA Protein Assay Kit
R0010 RIPA buffer(high)
PR1600 Prestained Protein Marker(14.4kD-97.4kD)
R0050 Nuclear Protein Extraction Kit

Related Paper:

[1] Zhongyuan Li,Xiumei Li,Tianhui Liu,et al. The critical roles of exposed surface residues for the thermostability and halotolerance of a novel GH11 xylanase from the metagenomic library of a saline-alkaline soil. International Journal of Biological Macromolecu Les. JuLy 2019;133:316-323. (IF 4.784)

[2] Qinlu Zhang,Qian Liu,Menghan Du,et al. Cetuximab and Doxorubicin loaded dextran-coated Fe3O4 magnetic nanoparticles as novel targeted nanocarriers for non-small cell lung cancer. Journal of Magnetism and Magnetic Materials. June 2018. (IF 3.046)