

BCA Protein Assay Kit

Cat: AK0651-50T

Size: 50T

Storage: BSA protein standard keeps at 4°C for 3 months, or at -20°C for 1 year, other reagents keep at room temperature for 1 year.

Components:

	50T		Storage
BCA reagent	100ml		RT
Cu reagent	3ml		RT
PBS dilution	30ml		RT
BSA Standard(5mg/ml)	1ml		-20°C

Product Description:

The BCA Protein Assay Kit is based on the protein reduces Cu^{2+} to Cu^{+} and the principle that BCA forms a purple-blue complex with Cu^{1+} under alkaline condition, followed by detecting absorbance at 562nm and comparing with standard curve to quantify the protein. Commonly used detergents SDS, Triton X-100, Tween do not affect the test results, but The BCA Protein Assay Kit is affected by chelating agents (EDTA, EGTA), reducing agents (DTT, mercaptoethanol) and lipids. During the experiments, when the high background caused by sample dilution or lysate, it is advisable to take the Bradford Protein Assay Kit into account.

Protocol

Prepare working solution:

1. BCA working solution

Dilute Cu reagent with BCA reagent (1:50). If precipitation occurs, it will disappear after mixing. The BCA working reagent could be kept at RT for 24 hours.

2. BSA standard working solution

Dilute 10 μl BSA (5mg/ml) to 100 μl BSA (0.5mg/ml) with PBS.

A. Microplate Reader

1. Add 0, 2, 4, 6, 8, 10, 12, 16, 20 μl BSA standard working solution (0.5mg/ml) to 96 well plates, add PBS to total 20 μl .

2. Dilute the sample properly, add 20 μl sample to 96-well plates.

Note: To avoid errors in operation steps, make the sample point located at 1/2 of the standard line as much as possible

3. BCA reaction

Add 200 μl BCA working solution to 96 well plates, incubate at 37°C for 15-30mins. Measure the absorbance at 562nm, draw standard curve to calculate the sample protein content. Avoid water evaporation when using incubator.

B. Spectrophotometer

1. Prepare eight (or more) 5ml centrifuge tube, add reagent as follows:

	1	2	3	4	5	6	7 (S 1)	8 (S 2)	9 (S 3)
BSA Standard working solution	0	40ul	80ul	120ul	160ul	200ul	200ul	200ul	200ul
PBS	200ul	160ul	120ul	80ul	40ul	0	0	0	0
BCA working solution	2ml	2ml	2ml	2ml	2ml	2ml	2ml	2ml	2ml

- Incubate at 37 °C for 15-30mins. Measure the absorbance at 562nm, draw standard curve to calculate the sample protein content. Avoid water evaporation when using incubator.