Hello Bio, Inc. 304 Wall St., Princeton, NJ 08540 USA

T. 609-683-7500 F. 609-228-4994

customercare-usa@hellobio.com



# **DATASHEET**

Mini BCA Protein Assay Kit

# **Product overview**

Name Cat No Biological description Mini BCA Protein Assay Kit

HB6653

Simple, rapid, detergent tolerant (up to 5%) kit for determining the concentration of proteins in solution.

This kit is optimized to measure protein concentrations from 0.5 to 200 µg/mL.

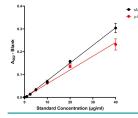
Key features of the mini-BCA Protein Assay Kit:

- **Detergent compatible** compatible with detergent concentrations up to 5%
- Wide assay range can measure protein concentrations from 0.5 to 200  $\mu g/ml$
- Stability kit is stable at room temperature

Biological action Description Kit

Simple, rapid, detergent tolerant kit for measuring the concentration of proteins in solution (0.5 to 200  $\mu$ g/mL).

# **Images**





# **Biological Data**

### **Application notes**



#### Mini BCA Assay Protocol

Before using the kit for the first time add 10ml of buffer to the protein standard to create a 200µg/ml solution. Use this to create a dilution series of 0, 0.5, 1, 2.5, 5, 10, 20, 40 and 200µg/ml samples (please see the pdf protocol for precisely how to do this). For best accuracy use the same buffer as your proteins of interest. The assay can either be carried out in microplate or tube format.

## **Microplate Protocol**

- $1.\,\text{Add}\ 150\mu\text{l}$  of each standard to a microplate well alongside the unknown samples. Ideally this should be carried out in triplicate.
- 2. Prepare the working reagent by mixing 1 volume of reagent C with 25 volumes reagent B. Then add 26 volumes reagent A to the C/B mixture. For easy calculation add 3μl reagent C, 75μl reagent B and 78μl reagent A per well.
- 3. Add 150µl of working reagent to each well and incubate for 2 hours at 37°C

- 4. Let the plate cool to room temperature for 1-2 minutes.
- 5. Measure absorbance at 562nm using a microplate reader. This should be ideally carried out within 40 minutes of the start of the assay to maximise accuracy.
- Subtract the absorbance of the 0mg/ml samples from all measurements then construct a standard curve using the sample data.
- 7. Use the standard curve to calculate the protein concentration of the unknown samples.

#### **Tube Protocol**

- 1. Add 1ml of each standard to labelled test-tubes alongside the unknown samples. Ideally this should be carried out in triplicate.
- 2. Prepare the working reagent by mixing 1 volume of reagent C with 25 volumes reagent B. Then add 26 volumes reagent A to the C/B mixture. For easy calculation add 20μl reagent C, 500μl reagent B and 520μl reagent A per well.
- 3. Add 1ml of working reagent to each tube and mix thoroughly.
- 4. Incubate for 1 hour at 60°C in a water bath. Alternatively the incubation can be carried out for 60 minutes at room temperature.
- 5. Cool all tubes to room temperature for 5 minutes.
- 6. Measure absorbance at 562nm using a spectrophotometer ensuring that all measurements are made within 10 minutes. Prior to taking the measurements ensure the spectrophotometer is blanked using a cuvette filled with dH<sub>2</sub>O.
- 7. Subtract the absorbance of the 0mg/ml samples from all measurements then construct a standard curve using the sample data.
- 8. Use the standard curve to calculate the protein concentration of the unknown samples.

# Solubility & Handling

Storage instructions Storage of solutions

Shipping Conditions Important Room temperature

Prepare and use solutions on the same day if possible. Store solutions at -20°C for up to one month if storage is required. Equilibrate to RT and ensure the solution is precipitate free before use.

Stable for ambient temperature shipping. Follow storage instructions on receipt.

This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not

for human or veterinary use

## **Chemical Data**

Kit contents

- Reagent A
- Reagent B
- Reagent C
- BCA Protein Standard