

Product Information | Certification of Analysis

Product Information

CAS: 881640-19-3

Lot No.

BT57 Reagent, Mass Spec Grade

Part No.	Name	Size/pkg
HLS BT57001	BT57 Reagent, Mass Spec Grade	1.5 mg

Description: BT57 is a fast, three-in-one reagent for denaturation, reduction, and alkylation, ideal for biopharmaceutical and proteomics research. In these fields, native protein structures are typically denatured, reduced, alkylated, desalted, and then prepared for enzymatic reactions. Conventional denaturants like urea and guanidine hydrochloride can chemically modify proteins (e.g., carbamylation), and traditional alkylating agents require light protection. BT57 addresses these issues, allowing for the rapid completion of denaturation, reduction, and alkylation in a single step. It is suitable for proteomics, biopharmaceuticals, and single-cell sample research.

Physical Appearance: Lyophilized powder.

Molecular Weight: 393.28 Da.

Resuspension Buffer: 52 μ L double-distilled water dissolve.

Storage Conditions: Powder at -20 $^{\circ}$ C, reconstituted solution at -80 $^{\circ}$ C.

Shelf life: 24 months at -80 $^{\circ}$ C as a solution; long-term stable at -20 $^{\circ}$ C as powder.

pH Range: pH 7-9 for protein denaturation reaction, will degrade and precipitate in solution at pH 2-4.

Reference Protocol:

Add 10 μ L BT57 to 10 μ L (50 μ g) protein sample, mix, and incubate at 60 $^{\circ}$ C for 20 min or 95 $^{\circ}$ C for 10 min.

Quality Control

Purity: > 99.9% based on BT Surfactant peak area, analyzed by Thermo QE HF mass spectrometry with positive ion mode ESI.

Degradation: 0.1% BT Surfactant peak area after incubation with 0.2% (v/v) formic acid at 45 $^{\circ}$ C for 30 min, analyzed by QE HF mass spectrometry with negative ion mode ESI.

ESI- MS1/MS2 Mass Spec. for BT Surfactant Finish Product

