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SUMO Protease Kit

The kit may be used for efficient cleavage of the SUMO protein from recombinant fusion proteins.

Product attributes

Storage Conditions	Store at -10 to -35 °C

Product Description

This kit that may be used for efficient cleavage of the SUMO protein from recombinant fusion proteins. The kit includes recombinant SUMO protease expressed from *E. coli*, 10X Reaction Buffer with and without salt, and a Control Substrate as an optional reaction control.

The Small Ubiquitin-like Modifier (SUMO) is a 12 kDa protein tag that enhances the stability and solubility of recombinant fusion proteins expressed in E. *coli*, resulting in increased yields of purified protein. SUMO Protease is a highly sequence-specific cysteine protease that recognizes the tertiary structure of SUMO protein. After purification, SUMO Protease can be used to efficiently and specifically cleave off the tag. Cleavage of N-terminal SUMO solubility tag removes all tag residues, releasing the recombinant purified protein with a native N-terminus. However, cleavage of C-terminal SUMO tag typically leaves 4-6 tag residues on the recombinant protein.

Biotium's recombinant SUMO Protease is expressed from *E. coli* with a His-tag for easy removal from the reaction using nickel affinity chromatography. The optimal temperature for cleavage is 30 °C, but the reaction can be performed at temperatures as low as 4 °C. The SUMO Protease Kit includes Control Substrate as an optional reaction control. It is a His-tagged SUMO fusion protein with a molecular weight of 35 kDa before cleavage, observed by 4-20% reducing SDS-PAGE. When Control Substrate is cleaved with SUMO Protease, two bands at ~16 kDa and ~18 kDa are observed under 4-20% reducing SDS-PAGE.

Biotium also offers a TEV Protease Kit that may be used for cleaving proteins or peptides containing the TEV protease recognition sequence E-N-L-Y-F-Q ↓ (S/G/A/M/C/H). View our full selection of enzyme substrates and assays as well as our unique technologies for protein detection and analysis.