

PRODUCT DATA SHEET



Bioworld Technology, Inc.

Recombinant 3C protease, His, Human

Catalog Number: BK0001-100IU

Source: Escherichia coli.

Quantity: 100IU

Description:

Recombinant PreScission Protease (rPSP) from human rhinovirus (HRV 3C) is a recombinant restriction-grade protease. PSP is a highly purified recombinant 6xHis-fusion protein, which recognizes the same cleavage site as the native enzyme. It is used to cleave affinity tags from fusion proteins. The optimum recognition site for this enzyme is the sequence Leu-Glu-Val-Leu-Phe-Gln|Gly-Pro(LEVLFQ|GP) and cleavage occurs between the Gln and Gly-Pro residues. The optimal temperature for cleavage is 30 °C; also it can be used at temperatures as low as 4 °C. It is recommended that the cleavage for each fusion protein be optimized by varying the amount of Recombinant PreScission Protease, reaction time, or incubation temperature. It can be removed by Ni²⁺ affinity resin. Recombinant PreScission Protease (rPSP) contains 217 amino acids with N-terminal His tag. A fully biologically active molecule, rPSP has a molecular mass of 24 kDa and is obtained by proprietary chromatographic techniques at GenScript.

Molecular Weight:

24kDa, observed by reducing SDS-PAGE.

Purity:

> 95% by SDS-PAGE analyses.

Biological Activity:

0.6 IU/μl. Unit Definition: One unit is defined as the amount of enzyme needed to cleave 100 μg of fusion protein in 16 hours to 90% completion at 4 °C in a

buffer containing 50 mM Tris-HCl, pH 7.0, 150 mM NaCl, 1 mM EDTA, and 1 mM DTT.

Physical Appearance:

Sterile Filtered White lyophilized (freeze-dried) powder.

Formulation:

Sterile liquid solution contains 50 mM Tris, 150mM NaCl, 1mM EDTA, 1mM DTT, 50% Glycerol, pH 7.5.

AA Sequence:

Endotoxin:

< 0.2 EU/μg, determined by LAL method.

Reconstitution:

Reconstituted in ddH₂O or PBS at 100 μg/ml.

Storage:

Recombinant PreScission Protease (rPSP) remains stable up to 1 year at -20 °C from date of receipt. Please avoid freeze-thaw cycles.

Usage:

This material is offered by USA Bioworld biotech for research, laboratory or further evaluation purposes. For research use only.