Datasheet

Version 20240411

HRV-3C Protease, His Tag

Cat. No.: Z03092

Synonyms: rPSP, PSP, HRV 3C Protease

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/GlyPro(LEVLFQ/GP) and cleavage occurs between the Gln and Gly-Pro residues. The optimal temperature for cleavage is 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 Ni^{2+} 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.

Source: *E. coli*

Species: Human Rhinovirus

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.

Molecular Weight: 24kDa, observed by reducing SDS-PAGE.

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

Purity: > 95% by SDS-PAGE analyses.

Storage: HRV-3C Protease, His Tag remains stable up to 1 year at -20°C from date of receipt. Please avoid freeze-thaw cycles.

For laboratory research use only. Direct human use, including taking orally and injection and clinical use are forbidden.