

HRV 3C Protease

Product Information

Name	Catalog	Size
HRV 3C	3CP-HE101-A	1000 U
Protease(10 U/ μ l)	3CP-HE101-B	5000 U

Product Description

HRV 3C Protease is a recombinant cysteine protease originated from the Human Rhinovirus 3C (HRV3C). It recognizes and cleaves the octapeptide sequence Leu-Glu-Val-Leu-Phe-Gln↓Gly-Pro (LEVLFG↓GP) or the core pentapeptide sequence Leu-Phe-Gln-Gly-Pro (LFQ↓GP) at low temperatures (4°C). This cleavage is used to remove tags from fusion proteins that contain the HRV 3C Protease recognition sequence, thereby obtaining specific protein fragments.

The product contains a His-tag and can be removed after cleavage using Ni-NTA resin.

Expression Source

E.coli

Storage Buffer

50 mM Tris-HCl, 150 mM NaCl, 10 mM EDTA, 1 mM DTT, 50% Glycerol, pH 8.0

Enzyme Activity Definition

One active unit is defined as, in a 1x HRV 3C Buffer (50 mM Tris-HCl, 150 mM NaCl, 1 mM EDTA, 1 mM DTT, pH 7.0), the amount of enzyme required to achieve more than 95% cleavage efficiency for 100 μ g of substrate over 16 hours at 4°C.

Transportation/Storage Method

Ship in dry ice. Store at -20°C \pm 5°C. Avoid freeze-thaw cycles.

Applications

Tag removal of fusion proteins

Protocol

(1) Add 100 μ g fusion proteins and certain amount of HRV 3C protease in 1xHRV 3C Buffer (50 mM Tris-HCl, 150 mM NaCl, 1 mM EDTA, 1 mM DTT, pH 7.0)

(2) Incubate at 4°C for 16 h and run SDS-PAGE for analysis

Cautions

(1) For proteins difficult to digest, extend the digestion time or increase the amount of 3C protease for a better digestion results.

(2) For research use only