



For research use only

ISO9001

HRV 3C Protease

Product	Quantity	Cat. No.	Remarks
HRV 3C Protease, 6x His	2,000 unit (100 µl)	EBF-1001	20 unit/µl, 6x His Tag
	10,000 unit (500 µl)	EBF-1002	20 unit/µl, 6x His Tag
HRV 3C Protease, 6x His-GST	1,000 unit (100 µl)	EBF-1003	10 unit/µl, 6x His + GST Tag
	5,000 unit (500 µl)	EBF-1004	10 unit/µl, 6x His + GST Tag

Description

HRV 3C protease is a site-specific endoprotease that cleaves after glutamine at its cleavage site Leu-Glu-Val-Leu-Phe-Gln-/Gly-Pro, commonly referred to as the PreScission Site. It cleaves between Gln and Gly. HRV 3C protease is a cysteine protease comes from Human Rhinovirus. Recombinant HRV 3C protease is purified from *E.coli* containing a clone of the Human Rhinovirus – HRV 3C protease gene. Since HRV 3C protease contains 6x His tag (cat# : EBF-1001 and 1002) or 6x His-GST tag (cat# : EBF-1003 and 1004) sequence, they can be easily removed by a metal affinity or glutathione (GSH) affinity chromatography after the cleavage reaction. The recombinant 6x His tagged HRV 3C protease is 22 kDa, and 6x His-GST tagged HRV 3C protease is 48.5 kDa in size.

Substrate Specificity

-Leu-Glu-Val-Leu-Phe-Gln ↓ - Gly-Pro-

Product Component

- HRV 3C Protease : 100 µl (100 µg, 2,000 units), or 500 µl (500 µg, 10,000 units)
- Control protein : 30 µg (1 µg/µl), produce 43.8 kDa and 48.4 kDa by HRV 3C protease

Unit Definition

One µg of HRV 3C protease has an equivalent to 10-20 unit activity. The activity of HRV 3C protease is tested using a control substrate protein. One unit will cleave >90% of 100 µg of protein in standard buffer at 4°C in 16 hours.

Specific Activity

- HRV 3C Protease (6x His Tag) : 20 unit/µg protein
- HRV 3C Protease (6x His, GST Tag) : 10 unit/µg protein performance tests

Storage Buffer

50 mM Tris-HCl, pH 8.0, 150 mM NaCl, 1 mM EDTA, 0.5 mM DTT, and 50% glycerol

HRV 3C Reaction Condition

20 mM Tris-HCl, pH 7.0, 150 mM NaCl, 1 mM DTT, 0.5 mM EDTA (optional)

→ caution : we do not provide reaction buffer in the product

Storage Temperature

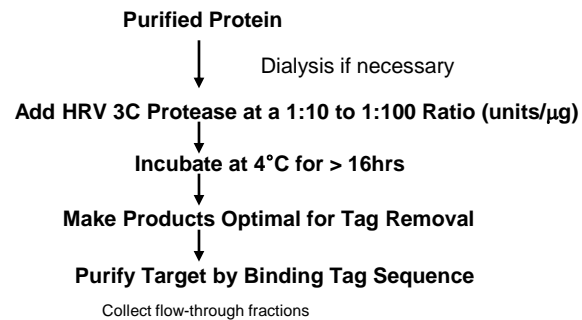
Store at -20°C

QC Tests:

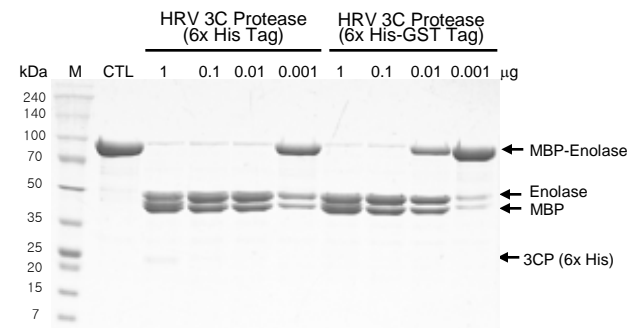
Activity, SDS-PAGE purity, performance tests

HRV 3C Protease Protocol

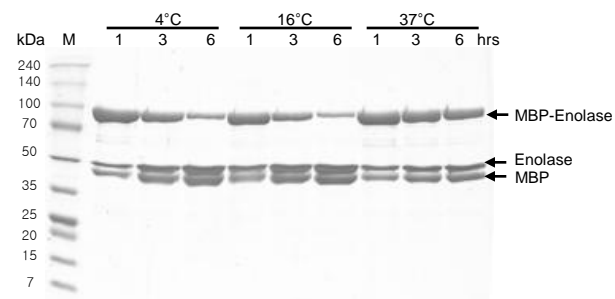
Cleavage Strategy:



HRV 3C Protease Digestion : Dose & Time & Temperature



20 μg of purified MBP-Enolase fusion protein was cleaved by 1 to 0.001 μg of HRV 3C Protease at 4°C for 16 hrs.



20 μg of purified MBP-Enolase fusion protein was cleaved by 0.2 unit of HRV 3C protease at indicated temperature for indicated time. 0.2 unit is equivalent to 10 ng HRV 3C Protease.