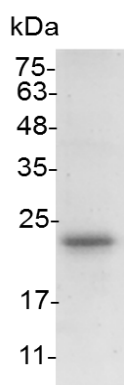


PRODUCT INFORMATION

HRV 3C Protease

v. 230201

Catalog number	C09002-bulk / C09002-1000U / C09002-10000U HRV 3C Protease C09002-B-bulk / C09002-B-1 10X HRV 3C Cleavage Buffer		
Package	Customized package / 1,000 U / 10,000 U HRV 3C Protease Customized package / 10 mL 10X HRV 3C Cleavage Buffer		
Description	HRV 3C Protease is a recombinant form of the 3C protease derived from human rhinovirus 14 expressed in E. coli (specific activity 1800-2000 U/mg). This product is a highly purified recombinant 6XHis-fusion protein. This protease requires neither metal nor cofactors for activity. HRV 3C Protease recognizes the cleavage site: Leu-Glu-Val-Leu-Phe-Gln ↓ Gly-Pro (LEVLFQ ↓ GP).		
Source	<i>Escherichia coli</i>		
Endotoxin level	<1 EU per 1 µg of the protein by the LAL method.		
Activity	One unit of HRV 3C Protease is defined as the amount of enzyme that will cleave >95% of 0.1 mg HRV 3C cleavage control protein in 150 mM NaCl, 50 mM Tris-HCl pH 7.5, at 4°C for 16 h.		
Purity	>98% as determined by SDS-PAGE. Purified by Ni-NTA chromatography.		
Formulation	The protein was lyophilized from a solution containing 50 mM Tris, 150 mM NaCl, 1 mM EDTA, 1 mM DTT, 0.04% Tween20, 8% trehalose, 8% mannitol.		
Reconstitution	It is recommended to reconstitute the lyophilized protein in sterile H ₂ O and incubate the stock solution for at least 20 min to ensure sufficient re-dissolved.		
Storage	Lyophilized protein should be stored at -20°C. Upon reconstitution, protein aliquots should be stored at -20°C. HRV 3C Protease Cleavage Buffer should be stored at -20°C or 4°C.		
Component	Catalog number	C09002-1000U	C09002-10000U
	HRV 3C Protease	1,000 U	1,0000 U
	10X HRV 3C Cleavage Buffer	10 mL	10 mL
	10X HRV 3C Cleavage Buffer: 1.5 M NaCl, 0.5 M Tris-HCl, pH 7.5		



SDS-PAGE analysis of recombinant HRV 3C Protease Protein

Component	Volume (μL)
HRV 3C Protease	X
100 μg protein	Y
10X HRV 3C Cleavage Buffer	10
H ₂ O	90-X-Y
Total volume	100

- Incubate the reaction mixture at 4°C for 16 hours or overnight.
- Determine cleavage level of the samples by SDS-PAGE analysis.
- HRV 3C protease: target protein ratio of 1:25~1:100 (U/μg) is used for most fusion protein cleavage.
- If shorter incubation time is required, more amount of HRV 3C protease or higher temperature (RT) can be implemented.
- Reaction can be performed at 4°C-37°C. 4°C is recommended as the starting standard.

Manuel

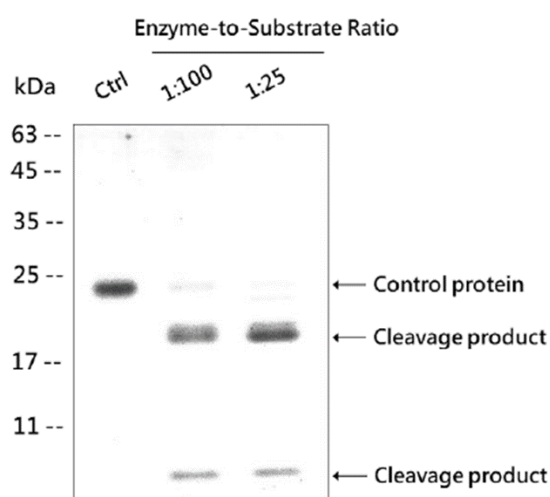


Fig. The control protein was cleaved by HRV 3C protease at 4°C for 16h.

Notes

- Cleavage efficiency may differ based on structure and properties of each target protein, we recommend testing several enzyme-to-substrate ratios, temperatures and incubation times.
- HRV 3C Protease reactions can be performed in a buffer which is optimal for the target protein. Reducing reagents (e.g., DTT) or salts (e.g., NaCl) can be added for cleavage efficiency evaluation.

For Research Use Only. Not for use in diagnostic and therapeutic procedures.