

RPT0039LQ

Leader in Biomolecular Solutions for Life Science



# Recombinant Human Rhinovirus Type 14 3C/ HRV 3C Protease

Catalog No.: RPT0039LQ **Recombinant**

## Sequence Information

Species	Gene ID	Swiss Prot
<I>E. coli</I>	1461213	P03303

**Tags**  
N-6His

**Synonyms**  
3C;Protease 3C; Picornain 3C;Genome polyprotein

## Product Information

Source	Purification
	≥ 95 % as determined by SDS-PAGE.

**Endotoxin**  
< 0.1 EU/μg of the protein by LAL method.

**Formulation**  
0.22 μm filtered solution of 50mM Tris, 150mM NaCl, 1mM EDTA, 1mM DTT, 50% glycerol, pH 7.0.

**Reconstitution**

## Contact



[www.abclonal.com](http://www.abclonal.com)

## Background

HRV 3C Protease encoded by human rhinovirus 14 is a highly purified recombinant cysteine protease with a His-tag. It recognizes the sequence Leu-Glu-Val-Leu-Phe-Gln↓Gly-Pro (LEVLFQ↓GP), cleaving between the Gln (Q) and Gly (G) residues. HRV 3C protease folds into two anti-parallel six-stranded β-barrels and the site cleft is located at the junction of the two β-barrels domains. The enzyme requires neither metal nor cofactors for activity. It has been demonstrated that the enzyme exhibits highest activity around neutral pH at temperature ranging from 22 to 37°C, even retaining robust activity at 4°C. Thus, cleavage can be performed at low temperature to enhance the stability of the target protein. The catalytic activity is insensitive to organic solvents (up to 10%); however, it can be strongly stimulated by high concentration of anions such as sulfate.

## Basic Information

### Description

Recombinant Human Rhinovirus Type 14 3C/ HRV 3C Protease is produced by E. coli cells expression system. The target protein is expressed with sequence (Gly1538-Gln1719) of Human Rhinovirus Type 14 3C/ HRV 3C(Accession #P03303) fused with His tag at the N-terminus.

### Bio-Activity

### Shipping

The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

### Operational Notes

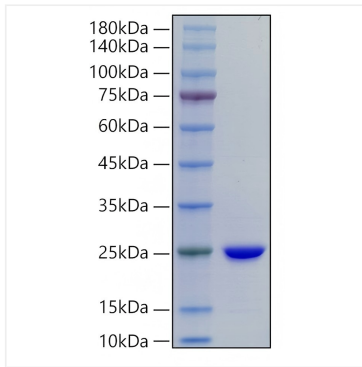
For your safety and health, please wear a lab coat and disposable gloves for handling.

### Storage

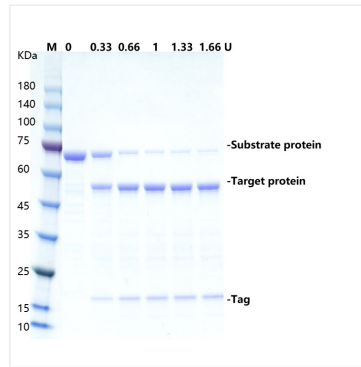
Store at -70°C. This product is stable at ≤ -70°C for up to 1 year from the date of receipt. For optimal storage, aliquot into smaller quantities after centrifugation and store at recommended temperature. Avoid repeated freeze-thaw cycles. Avoid repeated freeze/thaw cycles.

\* For your safety and health, please wear a lab coat and disposable gloves when handling.

## Validation Data



Recombinant Human Rhinovirus Type 14 3C/ HRV 3C Protease was determined by SDS-PAGE under reducing conditions with Coomassie Blue.



One unit will cleave >95% of 100  $\mu$ g control fusion protein in 50 mM Tris-HCl, 150 mM NaCl, 1 mM EDTA, 1 mM DTT, pH 7.0 at 4°C for 16 h.