Creative Enzymes®

HRV3C Protease from human, Recombinant

Cat. No. NATE-0345

Lot. No. (See product label)

Introduction

Description	Human rhinovirus 3C protease (HRV3C Protease) is a cysteine protease that recognizes the cleavage site of Leu-Glu-Val-Leu-Phe-Gln*Gly-Pro. It is supplied as a 47 kDa protein with both GST and Histidine tags for easy removal by His-Select or Glutathione agarose along with the cleaved tag. HRV3C Protease is capable of cleaving small peptides with the sequence of polyprotein processing sites. It cleaves after the glutamine residue. HRV cleavage site generally contains Gln/Gly scissile bond.
Applications	Human rhinovirus 3C protease (HRV3C Protease) is a cysteine protease that recognizes the cleavage site of Leu-Glu-Val-Leu-Phe-Gln*Gly-Pro. Supplied as a 47 kDa protein with both GST and Histidine tags for easy removal by His-Select or Glutathione agarose along with the cleaved tag. HRV3C Protease has a therapeutic implication because of its unique protein structure. It may be used for the biochemical and structural characterization conducted on HRV 3C protease along with the development of 3C protease inhibitors.
Synonyms	HRV3C Protease; HRV3C; Human rhinovirus 3C protease

Product Information

Species	Human
Source	E. coli
Form	Supplied as a solution in 25 mM Tris-HCl, pH 8.0, 50 mM NaCl, 1 mM TCEP and 50% glycerol
Activity	> 1 units/μg

Usage and Packaging

Preparation Instructions	It is recommended to use HRV3C Protease at a protease-to-target protein ratio of 1:100 (w/w) or 1 unit of HRV3C Protease to 100 μg of target protein in a buffer suitable for the target protein at 4°C overnight, with the target protein concentration at 1-2 mg/ml. In most cases, target proteins are completely cleaved with a protease to target protein ratio of 1:50 to 1:400, or 1 unit HRV3C Protease to 50-400 μg of target protein. The efficiency of cleavage may vary due to the sequences around the cleavage site, conformation and the solubility of the target protein. Due to its high specificity, more HRV3C Protease (at 1:10 ratio) or longer cleavage time at higher temperature (37°C) can be used to achieve high cleavage efficiency without non-specific cleavage of target proteins.

Storage and Shipping Information

Storage	−20°C