MCLAB
Molecular Cloning Laboratories

User Manual

Version 3.2

Product name: Turbo HRV3C Protease

Cat #: THRV3-100, THRV3-200, THRV3-OEM, B-CB10

Description:

MCLAB's HRC 3C Protease is fused with both GST and His tags, so that the fusion protein could be easily removed by either immobilized glutathione (GSH) resin or immobilized Ni-chelating resin. Turbo HRV3C Protease is highly active at 4°C of commonly used buffers, providing more flexibility in experimental design to keep the activity and intact structure of the target proteins.

Applications:

MCLAB's Turbo Human Rhinovirus (HRV) 3C Protease is a recombinant cysteine protease used to remove fusion tags from proteins with the HRV3C cleavage sequence. HRC3C Protease is highly specific for the PreScission Site, Leu-Glu-Val-Leu-Phe-Gln-↓-Gly-Pro, and cleaves between the Gln and Gly residues.

Supplied With:
HRV 3C Substrate, 100 µl (1 mg/ml)
10x HRV3C Protease Reaction buffer (10 ml)

HRV3C Protease 10X Cleaveage Buffer:
500 mM Tris-HCl (pH 8.0)

1.5 M NaCl

Protocol:

Cleavage Reaction In-Solution

1. Prepare cleavage reactions by adding the previously purified target protein into 10X HRV 3C Reaction Buffer diluted to 1X .
   Note: HRV 3C protease is active in a variety of different buffers. Optimize the enzyme:substrate ratio when using other purification buffers.

2. Add 1 µL (2 units) of HRV 3C protease to each of the reaction for up to 200 µg of fusion protein.
   Note: Test the proper enzyme:substrate ratio on a small scale before scale-up. Use a protease-to-target protein ratio in a range from 1:50 to 1:200.

3. Incubate the cleavage reaction overnight at 4°C for complete cleavage.
   Note: Completion of the cleavage reaction maybe monitored at different time points by removing a portion of the reaction to run on a SDS-PAGE gel.