

# User Manual

Version 3.1

**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.

## 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  $\mu$ L (2 units) of HRV 3C protease to each of the reaction for up to 200  $\mu$ g 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.