

TEV Protease, His

Cat. No.: Z03030-1K

Size: 1000.0 IU

Synonyms: rTEV, TEV, P1 protease

Description:

Tobacco Etch Virus Protease is a highly site-specific cysteine protease that is found in the Tobacco Etch Virus (TEV). The optimum recognition site for this enzyme is the sequence Glu-Asn-Leu-Tyr-Phe-Gln-(Gly/Ser) [ENLYFQ(G/S)] and cleavage occurs between the Gln and Gly/Ser residues, The most commonly used sequence is ENLYFQG. The protease is used to cleave affinity tags from fusion proteins. The optimal temperature for cleavage is 30°C; also it can be used at temperature as low as 4°C. It is recommended that the cleavage for each fusion protein be optimized by varying the amount of recombinant viral TEV protease, reaction time, or incubation temperature. It can be removed by Ni²⁺ affinity resin. Recombinant Tobacco Etch Virus Protease (rTEV) contains 231 amino acids with N-terminal His tagged. A fully biologically active molecule, rTEV has a

molecular mass of 28.4 kDa and is obtained by proprietary chromatographic techniques at GenScript.

Source: *E. coli*

Biological Activity: 6 IU/μl.

Unit Definition: One unit of TEV protease cleaves > 85% of 3 μg of control substrate in 1 hour at pH 8.0 at 30°C.

Molecular Weight: 28.4 kDa, observed by reducing SDS-PAGE.

Formulation: Sterile liquid solution contains 50mM Tris, 5mM DTT, 50% glycerol, pH7.5.

Purity: > 95% by SDS-PAGE analyses.

Storage: Recombinant Tobacco Etch Virus Protease (rTEV) remains stable up to 1 year at -20°C from date of receipt. Please avoid freeze-thaw cycles.