

**DATASHEET**  
Version 20181206**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 Ni<sup>2+</sup> 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.