

## Tobacco Etch Virus Protease - Purified

<b>Catalog No.:</b>	AR10511PU-N
<b>Quantity:</b>	0.5 kIU
<b>Background:</b>	TEV protease is the common name for the 27 kDa catalytic domain of the Nuclear Inclusion a (Nla) protein encoded by the tobacco etch virus (TEV). Because its sequence specificity is far more stringent than that of factor Xa, thrombin, or enterokinase, TEV protease is a very useful reagent for cleaving fusion proteins. TEV protease recognizes a linear epitope of the general form E-Xaa-Xaa-Y-Xaa-Q-(G/S), with cleavage occurring between Q and G or Q and S. The most commonly used sequence is ENLYFQG.
<b>Uniprot ID:</b>	<a href="#">Q0GDU8</a>
<b>NCBI:</b>	<a href="#">12227</a>
<b>Source:</b>	<i>E. coli</i>
<b>Format:</b>	<p><b>State:</b> Liquid sterile solution</p> <p><b>Purity:</b> &gt;90.0% as determined by both RP-HPLC and SDS-PAGE analysis.</p> <p><b>Purification Method:</b> Proprietary chromatographic techniques.</p> <p><b>Buffer System:</b> 0.50M Tris-HCl pH 8.0, 10mM DTT and 5mM EDTA</p>
<b>Description:</b>	<p>Recombinant TEV Protease (rTEV) is a site-specific protease purified from <i>E. coli</i>. The protease can be used for the removal of affinity tags from fusion proteins. The seven-amino-acid recognition site for rTEV is Glu-Asn-Leu-Tyr-Phe-Gln-Gly with cleavage occurring between Gln and Gly. The optimal temperature for cleavage is 30°C; however, the enzyme can be used at temperatures as low as 4°C.</p> <p>The rTEV contains <i>His tag</i>.</p> <p><b>Cleavage Conditions:</b> A number of variables can be changed to optimize the cleavage of any specific protein. The amount of rTEV, the temperature of the incubation, and the time needed for cleavage may be examined. If the protein of interest is heat-labile, then 4°C incubations are recommended. Reactions at 4°C will require longer incubation times and/or more rTEV.</p> <p><b>Unit Definition:</b> One unit of rTEV cleaves &gt;85% of 3 µg control substrate in 1 h at 30°C.</p>
<b>Storage:</b>	<p>Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.</p> <p>Avoid repeated freezing and thawing.</p> <p>Shelf life: one year from despatch.</p>