

## rTEV Protease

### Product Information

<b>Cat#</b>	DIA-573
<b>Description</b>	A genetically engineered TEV protease expressed in E. coli with a His-tag (6× His) and purified. It retains the native TEV enzyme activity while exhibiting enhanced stability and specificity over a broad temperature range. Used to cleave affinity tags from fusion proteins.
<b>Form</b>	Liquid
<b>Unit Definition</b>	One unit of rTEV protease activity is defined as the amount of enzyme required to cleave over 85% of 3 µg of substrate protein in 1 hour at 30 °C in 1× rTEV buffer (50 mM Tris-HCl, pH 8.0, 0.1 mM EDTA, 1 mM DTT).
<b>Synonyms</b>	Recombinant TEV protease
<b>Buffer</b>	25 mM Tris-HCl, 150 mM NaCl, 1 mM EDTA, 5mM DTT, 50% (v/v) Glycerol, pH 8.0
<b>Applications</b>	Cleavage of affinity tags from fusion proteins.
<b>Product Overview</b>	<p>Recognizes the seven-amino-acid sequence EXXYXQ↓(G/S), commonly Glu-Asn-Leu-Tyr-Phe-Gln↓-Gly.</p> <p>Optimal activity at pH 7.0 and 30 °C, but retains activity from pH 6.0–8.5 and 4–30 °C, allowing flexible reaction conditions.</p> <p>Post-cleavage, the N-terminal 6× His-tag enables removal via Ni-NTA resin for efficient target protein purification.</p>
<b>Purity</b>	≥95% (SDS-PAGE)
<b>Package</b>	1/5/10 KU