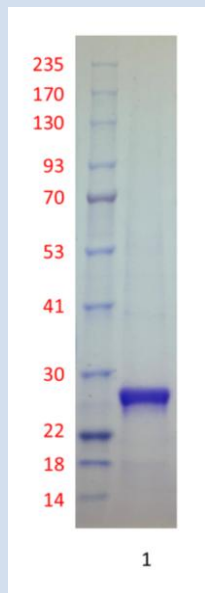


Product Name	Recombinant Engineered AiTEV™ Protease	SDS-PAGE gel
Synonym(s)	Tobacco Etch Virus, rTEV, TEV, P1 protease	
Quantity	1,000 Units	
Amino Acids	249 a. a.: T17S/L56V/N68D/I77V/S135G/S219V	
Molecular weight	27.6 kDa	
Purity	>90% by SDS-PAGE	
Tag	N-terminal His tag	
Expression Source	E. coli	
GenBank Accession #	NC_001555.1	
Application	Recombinant protein tag removal, recombinant protein characterization, ELISA, Western blot, crystallization studies.	
Formulation	25 mM tris, pH7.5, 150 mM NaCl, 40% Glycerol	
Storage and Stability	Stable for 12 months at -80°C, Avoid freeze/thaw cycles	1 – 2.5 µg AiTEV
Description	Recombinant Engineered TEV Protease-AI is a genetically optimized form of Tobacco Etch Virus (TEV) nuclear-inclusion-a endopeptidase designed for enhanced cleavage efficiency at the canonical seven-amino acid TEV recognition sequence: Glu-Asn-Leu-Tyr-Phe-Gln↓(Gly/Ser). The protease exhibits high site specificity and catalytic efficiency, making it suitable for the removal of affinity tags from purified recombinant proteins. AiTEV Protease demonstrates efficient cleavage at room temperature (25–35°C) across a broad range of buffer compositions (pH 4.0–9.0), with maximal activity observed at pH 8.0 and 30°C. Compared to the native TEV protease, AiTEV Protease exhibits improved stability, higher activity, and greater tolerance to buffer and temperature variations.	
Unit Definition	One unit of TEV protease cleaves >85% of 3 µg of control substrate in one hour at pH 8.0 at 30 °C.	
Activity	≥20,000 units/mg protein	
Reference	Wei, L et al., Protein Expression and Purification 83, 157-163 (2012) Phan J et al., The Journal of Biological Chemistry 277, 20564-50572 (2002) Dougherty W et al., Virology, 172, 302-310 (1989).	

Related products:

TEV Protease-His	190001	1,000 Units, 10,000 Units
PreScission Protease (HRV 3C)	190002	1,000 units, 10,000 units
Recombinant SUMO Protease (Ulp1)	190003	1,000 units, 10,000 units

TEV Protease-GST	190004	5 ug, 200 ug, 1 mg
Recombinant YopH	200100	10 ug, 20 ug, 100 ug, 1 mg
Recombinant Biotin Protein Ligase (BirA)	90101	100 ug
Recombinant SortaseA-5M	90201	50 ug
Recombinant Mouse Leukemia Inhibitory Factor	11-0001	10 ug, 100 ug
Recombinant Human LIF	12-0002	10 ug, 100 ug, 1 mg
Recombinant Human FGF-basic, Carrier-free	12-0005CFR	50 ug, 100 ug, 500 ug, 1 mg
DNA Polymerase Theta-N-Helicase Domain	7657643	20 ug, 100 ug
DNA Polymerase Theta-C terminal Domain	7657283	20 ug, 100 ug, 1 mg
DNA Polymerase Theta Full Length protein	7657385	10 ug, 50 ug
Kras Wild Type (WT), GST-tag	5727-4121G	50 µg, 100 µg
Kras WT, GST-tag, GDP Loaded	5727-WTG-G	50 µg, 100 µg
Kras WT, GST-tag, GppNHp loaded	5727-WTG-GP	50 µg, 100 µg
Kras G12C, GST-tag	5727-4122G	50 µg, 100 µg
Kras G12C, GST-tag, GDP Loaded	5727-4122G -G	50 µg, 100 µg
Kras G12C, GST-tag, GppNHp loaded	5727-4122G -GP	50 µg, 100 µg
Kras G12D, GST-tag	5727-4123G	50 µg, 100 µg
Kras G12D, GST-tag, GDP Loaded	5727-4123G -G	50 µg, 100 µg
Kras G12D, GST-tag, GppNHp loaded	5727-4123G -GP	50 µg, 100 µg
Kras G12V, GST-tag	5727-4128G	50 µg, 100 µg
Kras G12V, GST-tag, GDP Loaded	5727-4128G -G	50 µg, 100 µg
Kras G12V, GST-tag, GppNHp loaded	5727-4128G -GP	50 µg, 100 µg
Human SOS1, No Tag	7671	50 µg, 100 µg
Human SOS1, His Tag	7671HA	50 µg, 100 µg
Human RBD-RAF1, N-His tag, C-FLAG tag	7237231	50 µg, 100 µg
Recombinant SARS-CoV-2 Mpro, 3CL protease	728201	50 ug, 500 ug
Recombinant SARS-CoV-2 Papain-like Protease, CF	728251	50 ug, 100 ug
Recombinant SARS-CoV-2 Helicase (NSP13)	728231	10 ug, 50 ug, 100 ug
Recombinant SARS-CoV-2 NSP7	728264	100 ug, 1mg
Recombinant SARS-CoV-2 NSP8	728265	100 ug, 1mg
Recombinant Human BCL2	225201	100 ug
GST-CDK2: His-CyclinE1	C352E1	10 ug, 100 ug
GST-CDK2: His-CyclinA2	C352A2	10 ug, 100 ug
Recombinant Human Malic enzyme 1 (ME1)	180001	10 ug, 25 ug, 100 ug, 1 mg
Recombinant Human Malic enzyme 2 (ME2)	180002	10 ug, 25 ug, 100 ug, 1 mg
Recombinant Human Malic enzyme 3 (ME3)	180003	10 ug, 25 ug, 100 ug, 1 mg

Products are for research use only and are not intended for human use. We do not sell to patients.