

Recombinant Tobacco Etch Virus Protease, His-Tagged

Catalog No: #AP60426

Package Size: #AP60426-1 300IU #AP60426-2 1kIU #AP60426-3 10kIU

Orders: order@signalwayantibody.comSupport: tech@signalwayantibody.com

Description

Product Name	Recombinant Tobacco Etch Virus Protease, His-Tagged
Host Species	E.coli
Purification	> 90 % by SDS-PAGE analysis.
Other Names	P1 Protease
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none">-□ A minimum of 12 months from date of receipt, when stored at &le;-20 °C as supplied.-□ 1 month, 2 to 8 °C under sterile conditions after reconstitution.-□ 3 months, -20 to -70 °C under sterile conditions after reconstitution.

Background

TEV protease encoded by the tobacco etch virus is a catalytic domain of the Nuclear Inclusion a (NIa) protein. It consists of 241 a.a. amino acids with the molecular weight of 27kDa. TEV recognizes the amino acid sequence of the general form E-X-X-Y-X-Q (or S)/X’, and cleaves between Q (or S)/X’. In this form X and X’ stand for any of the amino acid residues, except that X’ cannot be P. The optimal cleavage site is ENLYFQ/G. As having the absolute specificity and widely using conditions like broad pH range and ionic strength, the TEV protease became more versatile than EK, thrombin and other protease used in biochemical applications, especially recombinant protein production. The optimal temperature for cleavage is 30°C; however, the enzyme can be used at temperatures as low as 4°C. Following digestion, TEV Protease can be removed from the reaction via the His tag sequence by Ni²⁺-chelate affinity chromatography.

Note: This product is for in vitro research use only and is not intended for use in humans or animals.