Datasheet

Cat. No. P1575

Recombinant Tobacco Etch Virus Protease, His-Tagged

Information

Gene ID	
Accession #	
Alternate Names	P1 Protease
Source	Escherichia coli.
M.Wt	
AA Sequence	
Appearance	Clear colorless liquid.
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles - 6 months from date of receipt, -20 to -70 °C as supplied - 3 months, -20 to -70 °C under sterile conditions after opening
Formulation	A 0.2 μm filtered solution in 25 mM Tris-HCl, pH 8.0, 75 mM NaCl, 5 mM EDTA, 10 mM GSH, with 50 % Glycerol.
Reconstitution	
Biological Activity	
Shipping Condition	Gel pack.
Handling	Centrifuge the vial prior to opening.
Usage	For Research Use Only! Not to be used in humans.

Components and Storage

Components	300IU	1kIU
Recombinant Tobacco Etch Virus Protease, His-Tagged	300IU	1kIU
Use a manual defrost freezer and avoid repeated freeze-thaw cycles - 6 months from date of receipt, -20 to -70 °C as supplied - 3 months, -20 to -70 °C under sterile conditions after opening		

Quality Control

Purity	> 90 % by SDS-PAGE analysis.
Endotoxin	

Description

TEV protease encoded by the tobacco etch virus is a catalytic domain of the Nuclear Inclusion a (NIa) protein. It is 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 wildly 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.

Reference

1. Dougherty WG, Cary SM, Parks TD. 1989. Virology, 171: 356-64
2. Harder B, Schomburg A, Pflanz R, et al. 2008. Biotechniques, 44: 765-72
3. Wu X, Wu D, Lu Z, et al. 2009. J Biomed Biotechnol, 2009: 591923
4. Taxis CandKnop M. 2012. Methods Mol Biol, 832: 611-26.

APExBIO Technology
www.apexbt.com
7505 Fannin street, Suite 410, Houston, TX 77054.
Tel: +1-832-696-8203 | Fax: +1-832-641-3177 | Email: info@apexbt.com