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## Recombinant Tobacco EV

产品编号	产品名称	包装
P7068-300IU	Recombinant Tobacco EV	300IU
P7068-1000IU	Recombinant Tobacco EV	1000IU

### 产品简介:

Species	Gene ID	Accession	Source	Length	MW	Tag
Tobacco	1502321	P04517	<i>E. coli</i>	-aa	-kDa	His

About this protein	
Name	Recombinant Tobacco EV (Recombinant Tobacco Etch Virus Protease; rTEV); 重组烟草蚀纹病毒蛋白酶
Synonyms	polyprotein; 6K2 protein; NIa-VPg protein; NIb protein; coat protein; P1 protein; HC-Pro protein; P3 protein; 6K1 protein; CI protein; NIa-Pro protein
Purity	>90% by SDS-PAGE analysis.
Unit Definition	One unit is defined as the amount of enzyme needed to cleave 3 µg of fusion protein in 1 hour to 85 % completion at 30°C in a buffer containing 50 mM Tris-HCl, pH 8.0, 0.5 mM EDTA, and 1 mM DTT.
Physical Appearance	Clear colorless liquid.
Formulation	A 0.2µm filtered solution in 25mM Tris-HCl, pH8.0, 75mM NaCl, 5mM EDTA, 10mM GSH, with 50% Glycerol.
Endotoxin	N/A
Reconstitution	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.
Category	Enzymes
Background	TEV protease encoded by the tobacco etch virus is a catalytic domain of the Nuclear Inclusion a (NIa) protein. It consists of 241a.a. 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 Ni <sup>2+</sup> -chelate affinity chromatography.
Amino Acid Sequence	N/A

### 包装清单:

产品编号	产品名称	包装
P7068-300IU	Recombinant Tobacco EV	300IU
P7068-1000IU	Recombinant Tobacco EV	1000IU
-	说明书	1份

### 保存条件:

-20°C或更低温度保存, 至少一年有效。由于蛋白的每次冻融均会引起部分失活, 所以首次配制成相应浓度的储存液后(请根据产品

简介中Reconstitution一栏的信息配制储存液), 须分装后-20°C或更低温度冻存, 以避免反复冻融。

### 注意事项:

- 由于有些塑料管壁对某些蛋白有较强的吸附作用, 溶液中的蛋白很容易粘附在管壁上, 并且粘附后的蛋白很难与管壁分离。而载体蛋白(Carrier protein, 如0.1% BSA等)的主要作用是预先封闭塑料管壁上的蛋白结合位点, 使细胞因子或重组蛋白不会粘附于管壁。所以一定要使用产品简介中Reconstitution一栏的信息配制储存液。
- 本产品仅限于专业人员的科学研究用, 不得用于临床诊断或治疗, 不得用于食品或药品, 不得存放于普通住宅内。
- 为了您的安全和健康, 请穿实验服并戴一次性手套操作。

### 使用说明:

1. 收到产品后请立即按照说明书推荐的条件保存。除非特别注明, 碧云天相关产品均为冻干粉, 由于微量的蛋白在冻干过程中沉积在管内, 形成很薄或不可见的蛋白层, 所以在打开管盖前, 我们建议在离心机中约8,000-12,000g离心10-30秒, 使附着在管盖或管壁上的蛋白聚集于管底。
2. 请根据实验目的并按照产品简介中Reconstitution一栏中的信息配制储存液。大多数细胞因子或重组蛋白的冻干粉是很容易溶解的, 一般用移液枪的枪头轻吹几下或者轻轻摇晃瓶子, 即可使细胞因子或重组蛋白完全溶解。请勿用vortex剧烈振荡, 以免蛋白变性而失活。
3. 具体的最佳工作浓度请自行参考相关文献, 或者根据实验目的, 以及特定细胞和动物, 通过实验进行摸索和优化。

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