# **TEV Protease**

Product specification

Catalog Number	Specification
MT01050	50U
MT01250	250U
MT01500	500U

#### **Definition of enzyme activity**

1U was meant the required enzyme dosage that more than 95% target protein have been digested after reacting 16h at  $4\,^\circ\! C$ 

#### **Product introduction**

TEV Protease (Tobacco etch virus protease) is a recombinant protease derived from the Tobacco etch virus (TEV) Nla, which is used to remove the affinity labeling of the purified fusion protein. TEV Protease has a strong site specificity, which can identify the seven amino acid sequences of EXXYXQ (G/S). The most common is ENLYFQG, the cutting site is between glutamine and glycine or serine. The enzyme is active over a wide range of pH 5.5-8.5 and 4-30 °C, so that the choice of reaction conditions can be modified depending on the protein of interest. The TEV Protease produced by GeneUniversal Inc. is a recombinant protease from E coli expression after Affinity purification. TEV Protease contains polypeptide label, which can be removed by affinity chromatography after the enzymatic reaction has been completed.

#### Preservation condition

Long-term storage at -80  $^{\circ}$ C, can be stored for 2 years; or a small amount of packaging stored at -20  $^{\circ}$ C, can be stored for 6 months, avoid repeating freezing and thawing.

## **Operational approach**

1. Configurate the following reaction system in the EP tube:

Fusion protein	1mg
TEV Protease	10U

- 2. Incubate at suitable temperature after mixing the above reaction system. It is recommended that the reaction conditions of enzyme digestion is recommended at  $4^{\circ}$ C overnight.
- 3. After the enzyme digestion, a small amount of samples can be selected for SDS-PAGE analysis. If you need to remove the TEV Protease in the reaction system after the enzyme digestion, using histidine tags purification resin affinity chromatography.

### Notes

- 1. In order to achieve the best digestion effect, please ensure that the recombinant protein is partially or completely purified protein.
- 2. For most fusion protein, the best concentration of NaCl is 150mM of TEV protein Protease in the optimal eactive Liquid. However, according to the actual situation, the concentration of NaCl can be adjusted between 100 mM and 300 mM to achieve the best effect. The concentration of salt in the fusion protein should be considered in the experiment.
- 3. If fusion protein contains denaturant, sdenaturant should be removed before carrying out enzyme digestion reaction
- 4. This product is limited to the scientific research of professional personnel and shall not be used for clinical diagnosis or treatment, and shall not be used for food or medicine. For your safety and health, please wear lab clothes and wear disposable gloves.