

Recombinant Glu-C, Lyophilized

Product information

Product No.	Size	Activity
YJ-O-136-20	20µg	>7U/mg
YJ-O-136-100	100µg	>7U/mg

Product description

Glu-C protease, derived from *Staphylococcus aureus* V8 (*S. aureus* V8) and also known as V8 protease, is expressed in *E. coli*. This enzyme specifically hydrolyzes the peptide bonds at the carboxyl terminus of glutamic acid (Glu) or aspartic acid (Asp) residues. Its specificity is directly influenced by the components of the buffer. In NH_4HCO_3 buffer at pH 7.8 and $\text{CH}_3\text{COONH}_4$ buffer at pH 4.0, it recognizes and cleaves the peptide bonds at the carboxyl terminus of Glu. In phosphate buffer at pH 7.8, it recognizes and cleaves the peptide bonds at the carboxyl terminus of either Glu or Asp, and the hydrolysis rate for Glu is higher than that for Asp. The pH range for the enzyme's activity is 4.0-9.0. It can be used alone or in combination with other specific proteases for the enzymatic hydrolysis of protein solutions.

- Unit definition: One unit (U) is defined as the amount of enzyme required to catalyze the substrate (Z-Phe-Leu-Glu-4-pNA) to generate 1 µmol of p-nitroaniline (pNA) per minute under the conditions of 25 °C and pH 7.8.
- Storage solution (Before lyophilization): 50 mM Hepes, pH 7.8.

Product components

Components	Size1	Size2
Recombinant Glu-C	20µg	100µg

Transportation and storage

- Storage: This product should be stored at 2-8°C, where it can be preserved for at least 12 months. After reconstitution, it can be stored at 2-8°C for 2 months.
- Transportation: Ice pack.

Product application

- Peptide mapping analysis
- Protein identification

Usage (for reference only)

- This product can be reconstituted with ultrapure water to a final concentration of 1 mg/ml and directly applied to protein digestion. Incubate the protein with Glu-C at a protease : protein ratio of 1:100 to 1:20.

- Digest at 37°C for 2 hours to overnight.

Precaution

- After reconstitution, try to avoid repeated freeze-thaw cycles for this product;
- Please wear lab coat and disposable gloves when using;
- This product should not be used directly for clinical diagnosis and treatment.