

Recombinant Kex2 Proteinase

Product Number: RE15

Shipping and Storage

1. Store at -15°C below, stable within 24 months. Dissolve in storage buffer(20mM NaAC-HAC, 2mM Ca²⁺, pH5.2) and store in sub-packages -15°C below stable within 6 months.
2. It is transported in an ice pack to keep it active.

Description

Kex2 is a Ca²⁺-dependent serine protease and cleaves at C-terminal site of Lys-Arg, ArgArg, Pro-Arg in pro-a, factor and killer-toxin precursors maturing, it was discovered in *Saccharomyces cerevisiae*. But Kex2 can't recognize and cut a single basic amino acid, such as carboxyl end peptide bond of arginine and lysine. Recombinant Kex2 is a genetically engineered protein expressed in *Pichia pastoris* and purified by high pressure liquid chromatography. The optimal pH of Kex2 protease is 9.0, and the optimal temperature is 37°C It is stable in buffer (pH 5.0-6.0)

The product adopts Recombinant *Pichia pastoris* high-efficiency secretion and expression technology, and is separated and purified from it. It is a Recombinant Kex2 protease with high purity and high activity.

Item	Feature
Appearances	White or off-white powder
Specific activity	≥10U/mg pro.(Check COA)
MW	70.0±7.0 kDa
Residue DNA	≤100ng/mg pro.
Residue HCP	≤100ng/mg pro.

Enzyme activity definition: At 25°C, In 3ml reaction system of 50mM Tris-HCl, 2mM CaCl₂, pH 8.0, the amount of enzyme that catalyzes the release of 1μmol 4-nitroaniline from the substrate Boc-QRR-pNA per minute is defined as one unit of enzyme activity (Unit).

Features

1. No animal origin: no animal virus, no pathogenic substance, no foreign factor pollution, high safety.
2. High purity: high specific activity.
3. Stable quality and batch production can ensure stable and continuous batch production; There is no difference between product batches, and the production scale is more than 1000L.
4. Compliance: the production equipment and production environment meet the requirements of relevant regulations and GMP guidelines.
5. Complete quality documents: according to customer requirements, relevant regulatory supporting documents can be provided.

Protocol

1. Recommended reaction buffer:pH 7.0-9.0, 50mM Tris-HCl, 2mM Ca²⁺ or HEPES, 5mM Ca²⁺. If it is not used immediately after dissolution, it is recommended to use 20mM (pH 5.2) NaAc-HAc, 2mM Ca²⁺ buffer to dissolve the lyophilized powder. The final concentration of enzyme after dissolution is about 1-10mg/ml. Store at -15°C below after sub-packaging as needed.
2. During the reaction, use pH 7.0-9.0, 50mM Tris-HCl, 2mM Ca²⁺ or HEPES, 5mM Ca²⁺ as the reaction diluent.

Note: The optimal reaction of the enzyme is pH 9.0, and the stable pH is 5.0-6.0.