Recombinant Bovine Enterokinase Light Chain, Yeast

#R00504

Size: 100 IU/250 IU

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.

Warning: This product is intended for scientific research only. It is not to be used for medical or diagnostic procedures in humans or animals, nor as a food, cosmetic, or household product.

Background

Enterokinase (EK) is an amino protease existing in duodenum of mammal and is involved in digestion. It consists of a disulfide-linked 82–140 kDa heavy chain which anchors enterokinase in the intestinal brush border membrane and a 35–62 kDa light chain which contains the catalytic subunit. Additionally, both of the chains are derived from a single precursor that is cleaved by a trypsin-like protease. EK can specially recognize the amino acid sequence DDDDK, and digest the peptide bond after the lysine residue.rEK was report to be more effective than nature EK in cleaving recombinant proteins. Furthermore, the light chain possesses the whole enzyme activity of EK.rBoEKL has the highest activity than EK of other species and is used wildly in biochemical applications.

Product Specification

Synonyms	Enterokinase, Serine Protease 7, Transmembrane Protease Serine 15
Species	Bovine
Source	Pichia Pastoris
Unit Definition	One unit is defined as the amount of enzyme needed to cleave 50 μg of fusion protein in 16 hours to 95 % completion at 25 °C in a buffer containing 25 mM Tris-HCl, pH 7.6, 50 mM NaCl, and 2 mM $CaCl_2$.
Molecular Weight	Approximately 43.0 kDa, a single glycosylated polypeptide chain containing 235 amino acids.
Physical Appearance	Sterile liquid.
Formulation	50 mM Tris-HCl, pH 8.0, 0.5 M NaCl and 50 % glycerol.
Endotoxin	Less than 1EU/μg of rBoEKL, Yeast as determined by LAL method.