Recombinant Bovine Enterokinase

Catalog No: #C46101

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Description

Product Name	Recombinant Bovine Enterokinase
Brief Description	Recombinant Protein
Host Species	E.coli
Target Name	Recombinant Bovine Enterokinase
Other Names	Enterokinase, Serine Protease 7, Transmembrane Protease Serine 15
Uniprot	Q92621
GeneID	23165;
Calculated MW	Approximately 28 kDa, a single
SDS-PAGE MW	Sterile liquid.
Formulation	50 mM Tris-HCl, pH 8.0, 0.5 M NaCl and 50 % glycerol.
Storage	One year when stored at -20 °C. Avoid repeated freeze thaw cycles.

Application Details

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 CaCl2. < div>

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Physical Appearance: Sterile liquid< div>

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Endotoxin: Less than 1EU µg of rBoEKL as determined by LAL method< div>

Background

Enterokinase (EK) is an amino protease existing in duodenum of mammal and is involved in digestion. It consists of a disulfide-linked 82C140 kDa heavy chain which anchors enterokinase in the intestinal brush border membrane and a 35C62 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. rBoEK has the highest activity than EK of other species and is used wildly in biochemical applications.

References

1. Yuan LDandHua ZC. 2002. Protein Expr Purif, 25: 300-4.
2. Peng L, Zhong X, Ou J, et al. 2004. J Biotechnol, 108: 185-92.
3. Light AandJanska H. 1991. J Protein Chem, 10: 475-80.
4. Kubitzki T, Minor D, Mackfeld U, et al. 2009. Biotechnol J, 4: 1610-8.