



RayBiotech, Inc.

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Certificate of Analysis and Data Sheet

Recombinant Bovine Enteropeptidase/Enterokinase

Catalog No.
228-10394

Source
Pichia pastoris

Synonyms

Enteropeptidase, EK, EC 3.4.21.9, Enterokinase, Serine protease 7, ENTK, MGC133046.

Introduction

Enteropeptidase or enterokinase is an enzyme involved in human digestion. It is produced by cells in the duodenum wall, and is secreted from duodenum's glands, the crypts of Lieberkühn, whenever ingested food enters the duodenum from the stomach. Enteropeptidase has the critical job of turning trypsinogen (a zymogen) to trypsin, indirectly activating a number of pancreatic digestive enzymes.

Enteropeptidase is a serine protease enzyme (EC3.4.21.9). Enteropeptidase is a part of the Chymotrypsin-clan of serine proteases, and is structurally similar to these proteins.

Description

Enterokinase (rEK) Bovine Recombinant is the catalytic subunit of bovine enterokinase, which is expressed by the yeast and purified to yield a high enzyme activity preparation. EK recognizes the sequence Asp-Asp-Asp-Asp-Lys and cleaves the peptide bond after the lysine residue. The enzyme can be used to cleave any fusion protein that carries this sequence.

Recombinant Bovine Enterokinase is a single glycosylated polypeptide chain containing 235 amino acids and having an MW of ~43kDa.

Physical Appearance

Liquid solution.

Formulation

rEK in 50mM potassium phosphate, pH 8.0, 500mM NaCl and 50% glycerol should be stored at -20°C.

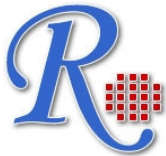
Stability

One year when stored at -20°C. **Please avoid freeze-thaw cycles.**

Unit Definition

One unit is defined as the amount of enzyme needed to cleave 50µg of fusion protein in 16 hours to 95% completion at 25°C in a buffer containing 25mM Tris-HCl, pH 7.6, 50mM NaCl, and 2mM CaCl₂.

**The products are furnished for LABORATORY RESEARCH USE ONLY.
Not for diagnostic or therapeutic use.**



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Assay Conditions

Each reaction contains 50 μ g of partially purified thioredoxin-NP-27 fusion protein and varying amounts of Bovine EK. Reactions were incubated at 25°C for 16 hours and analyzed on a Coomassie stained 15% SDS gel.

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