DATASHEET
Version 20181206

Enterokinase, His, Bovine

Cat. No.: Z03004-100

Size: 100.0 IU

Synonyms: Enteropeptidase, ENTK, PRSS7

Description:

Enterokinase (EK) is an enzyme produced by cells of the duodenum and involved in human digestion. It plays a role of turning trypsinogen to its active form trypsin, and indirectly activates the pancreatic digestive enzymes. Enterokinase is a specific protease that cleaves after a lysine preceded by four aspartic acids: Asp-Asp-Asp-Asp-Lys. Enterokinase will not work if the recognition site is followed by a proline. rbEK with 6 × His-tag binds with Ni2+ affinity chromatography and was designed for removing from digestion system.
Recombinant Bovine Enterokinase (rbEK) as the light chain is a single glycosylated polypeptide chain containing 200 amino acids. A fully biologically active molecule, rbEK has a molecular mass of 22.7 kDa and is obtained by proprietary chromatographic techniques at GenScript.
Components:

 100 IU(or 500IU or 5000IU) Recombinant Bovine Enterokinase (in 20mM Tris-HCl, pH 7.4, 200mM NaCl,
2mM $CaCl_2$, 50% glycerol)   100μg Cleavage Control Protein (Lyophilized after extensive dialysis against PBS, pH 7.0)   3.6 ml EK Dilution/Storage Buffer (20mM Tris-HCl, pH 7.4, 200mM NaCl, 2mM $CaCl_2$, 50% glycerol)   1.8 ml 10X EK Cleavage/Capture Buffer (200mM Tris-HCl, pH 7.4, 500mM NaCl, 20mM $CaCl_2$)

Source: *P. pastoris*

Species: Bovine

Biological Activity: 5 IU/μl.
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 22°C in a buffer containing 25mM Tris-HCl, pH 8.0.

Molecular Weight: Theoretical MW: 22.7 kDa.
Apparent MW: 40.0 kDa, observed by reducing SDS-PAGE.

Formulation: Sterile liquid solution contians 20mM Tris, 200mM NaCl, 2mM $CaCl_2$, 50% glycerol, pH 7.4.

Purity: > 95% by SDS-PAGE analyses.

Endotoxin Level: < 1.0 EU/μg, determined by LAL method.

Storage: Recombinant Bovine Enterokinase (rbEK) remains stable up to 1 year at -20°C from date of receipt. It will remain stable at 37°C for one week without losing any activity.Please avoid freeze-thaw cycles.

GenScript USA, Inc.
860 Centennial Ave. Piscataway, NJ 08854
Tel: 1-877-436-7274; 1-732-885-9188