

Version: 02  
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## DATASHEET

### Enterokinase, His, Bovine

**Cat. No.:** Z03004-100; Z03004-500; Z03004-5000

**Size:** 100 IU / 500 IU / 5000 IU

**Synonyms:** Enteropeptidase, ENTK, PRSS7

**Source:** P. pastoris

**Species:** Bovine

**Biological Activity:** 5 IU/ $\mu$ l.

Unit Definition: One unit is defined as the amount of enzyme needed to cleave 50  $\mu$ g of fusion protein in 16 hours to 95% completion at 22°C in a buffer containing 25mM Tris-HCl, pH 8.0.

**Molecular Weight:** ~40 kDa, observed by reducing SDS-PAGE.

**Formulation:** Sterile liquid solution contains 20mM Tris, 200mM NaCl, 2mM CaCl<sub>2</sub>, 50% glycerol, pH 7.4.

**Purity:** > 95% as analyzed by reducing SDS-PAGE.

**Endotoxin Level:** < 1.0 EU/ $\mu$ g, determined by gel clot 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.

#### Description:

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  $\times$  His-tag binds with Ni<sup>2+</sup> 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<sub>2</sub>, 50% glycerol)

100 $\mu$ g 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<sub>2</sub>, 50% glycerol)

1.8 ml 10X EK Cleavage/Capture Buffer (200mM Tris-HCl, pH 7.4, 500mM NaCl, 20mM CaCl<sub>2</sub>)

**For laboratory research use only. Direct human use, including taking orally and injection and clinical use are forbidden.**