

PRODUCT DATA SHEET



Bioworld Technology, Inc.

Recombinant Enterokinase, His, Bovine

Catalog Number: BK0338-5000IU

Source: *P. pastoris*

Quantity: 5000IU

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. 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.

Molecular Weight:

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

Purity:

> 95% by SDS-PAGE analyses.

Biological Activity:

5 IU/ μ l.

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

Physical Appearance:

Sterile Filtered White lyophilized (freeze-dried) powder.

Formulation:

Sterile liquid solution contains 20mM Tris, 200mM NaCl, 2mM CaCl₂, 50% glycerol, pH 7.4.

AA Sequence:

Endotoxin:

< 1.0 EU/ μ g, determined by LAL method.

Reconstitution:

Reconstituted in ddH₂O or PBS at 100 μ g/ml.

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.

Usage:

This material is offered by USA Bioworld biotech for research, laboratory or further evaluation purposes. For research use only.