DATASHEET
Version 20181206

Enterokinase (EK), His, Lyophilized, Bovine

Cat. No.: Z03376-50

Size: 50.0 ug

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(DDDDK↑). Enterokinase will not work if the recognition site is followed by a proline. rbEKhas the highest activity than EK of other species and is used wildly in biochemical applications. rbEK with 6 × His-tag binds with Ni2+ affinity chromatography and was designed for removing from digestion system.
Recombinant Bovine Enterokinase (His-tagged) (rbEK) as the light chain is a single glycosylated polypeptide chain containing 200 amino acids, 6 × His at C-terminus. A fully biologically active molecule, rbEK has a molecular mass of 40 kDa and is obtained by proprietary chromatographic techniques at GenScript.

Source: *P. pastoris*

Species: Bovine

Biological Activity: 100 IU/μg
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: 40 kDa, observed by reducing SDS-PAGE.

Formulation: Lyophilized from a 0.2 μm filtered solution in 20mM Tris-HCl, pH 7.4, 200mM NaCl, 2mM CaCl2.

Reconstitution: Reconstituted in sterile EK Storage Buffer (20mM Tris-HCl, pH 7.4, 200mM NaCl, 2mM $CaCl_2$, 50% glycerol) at 0.1 mg/ml

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

Endotoxin Level: <0.2 EU/μg, determined by LAL method.

Storage: Lyophilized recombinant Bovine Enterokinase (His-tagged) (rbEK) remains stable up to one year at -20°C from date of receipt. Please avoid freeze-thaw cycles.

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