



Product Data Sheet

□ Cat # RP-397

Recombinant Bovine Enteropeptidase/Enterokinase

Size: □ 20 IU

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 (EC 3.4.21.9). Enteropeptidase is a part of the Chymotrypsin-clan of serine proteases, and is structurally similar to these proteins.

Source: *Pichia pastoris* 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. EK in 50mM potassium phosphate, pH 8.0, 500mM NaCl and 50% glycerol should be stored at -20°C.

Applications and Suggested Dilutions: Users must optimize the appropriate concentration and conditions for each assay.

Storage and Stability: One year when stored at -20°C, three weeks at room temperature. **Please avoid freeze-thaw cycles.** If supplied in powder then reconstitute it in 100 ul water for 1 mg/ml stock and store in liquid at 4°C for ~1 week or aliquots in suitable size and store at -20°C for long term storage.

Unit Definition: One unit of EK is the amount of enzyme required to digest 0.5mg of thioredoxin-NP-27 fusion protein to 90% completion in 16 hours at 37°C

Usage: This item is for LABORATORY RESEARCH USE ONLY. The product may not be used as drugs, agricultural or pesticidal products, food additives or household chemicals.

RP-397

110208V