

Bovine, Recombinant (PRSS7) Expressed in

PRODUCT INFORMATION

Enterokinase is a serine proteinase in the duodenum that plays a critical role in mammalian digestion. It is the physiological activator of pancreatic trypsinogen. It converts trypsinogen into its active form trypsin, by cleaving its aminoterminal hexapeptide Val(Asp)⁴-Lys. More recently, the enterokinase has been shown to have a broad utility in cleaving fusion proteins produced in . The enzyme is particularly suitable for this role because of its high degree of specificity, its tolerance to a wide range of reaction conditions, and the fact that its recognition sequence lies entirely on the aminoterminal side of the scissile bond. This enzymatic activity allows release of carboxyl-terminal fusion partners from fusion proteins without leaving unwanted amino acid residues on their amino termini.

235 non-glycosylated

approximately 43.0 kDa

Expressed in

One unit is defined as the amount of enzyme needed to cleave 50 ug of fusion protein in 16 hours to 95% completion at 25°C in a buffer containing 25 mM Tris-HCl, pH 7.6, 50 mM NaCl, and 2 mM CaCl₂.

Sterile liquid

50 mM Tris-HCl, pH 8.0, 0.5M NaCl and 50% glycerol.

Less than 1EU/mg of rbEK as determined by LAL method.

One year when stored at -20°C. Avoid repeated freeze/thaw cycles.

FOR RESEARCH USE ONLY

REFERENCES

Holzinger A, Maier EM, Bück C, et al (2002). "Mutations in the proenteropeptidase gene are the molecular cause of congenital enteropeptidase deficiency". *Am. J. Hum. Genet.* 70 (1): 20–5.



Crystal structure of Enteropeptidase with an inhibitor
(

GENE INFORMATION

[protease, serine, 7 \(enterokinase\)](#)

PRSS7; EC 3.4.21.9; ENTK; Enterokinase; MGC133046; enterokinase; enteropeptidase; proenterokinase; Enteropeptidase precursor; Serine protease 7; human enterokinase; EC 3.4.21.9; protease, serine, 7; serine protease (enterokinase); protease, serine, 7 (enterokinase)

[NM 174439](#)

[NP 776864](#)

[EC 3.4.21.9](#)

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The reaction catalysed by Enteropeptidase:
trypsinogen → trypsin + octapeptide

Enteropeptidase cleaves after Lysine if the Lys is preceded by four Asp and not followed by a Pro.

peptidase activity; scavenger receptor activity