

Enterokinase, human recombinant protein
Serine protease 7, transmembrane protease serine 15, Enteropeptidase
Catalog # PBV10771r

Specification

Enterokinase, human recombinant protein - Product info

Primary Accession [P98073](#)
Calculated MW **97.5 kDa** KDa

Enterokinase, human recombinant protein - Additional Info

Gene ID **5651**
Gene Symbol **ENTK**
Other Names
Serine protease 7, transmembrane protease serine 15, Enteropeptidase

Gene Source **Human**
Source **CHO cells**
Assay&Purity **SDS-PAGE; ≥90%**
Assay2&Purity2 **HPLC;**
Recombinant **Yes**
Sequence **Heavy chain: LTIKESQARGA ALGQSHEARA
TFKITSGVTY NPNLQDKLSV DFKVLAFDLQ
QMIDEIFLSS NLKNEYKNSR VLQFENGSI
VVFDFFAQW VSDQNVKEEL IQGLEANKSS
QLVTFHIDLN SVDILDKLTT TSHLATPGNV
SIECLPGSSP CTDALTCIKA DLFCDGGEVNC
PDGSDDEDNKM CATVCDGRFL LTGSSGSFQA
THYPKPSETS VVCQWIIRVN QGLSIKLSFD
DFNTYYTDIL DIYEGVGSSK ILRASIWETN
PGTIRIFSNQ VTATFLIESD ESDYVGFNAT
YTAFNSSELN NYEKINCNE DGFCFWVQDL
NDDNEWERIQ GSTFSPFTGP NFDHTFGNAS
GFYISTPTGP GGRQERVGLL SLPLDPTLEP
ACLSFWYHMY GENVHKLSIN ISNDQNMEKT
VFQKEGNYGD NWNYGQVTN ETVKFKVAFN
AFKNKILSDI ALDDISLTYG ICNGSLYPEP
TLVPTPPPEL PTDCGGPFEL WEPNTTFSST
NFPNSYPNLA FCVWILNAQK GKNIQLHFQE
FDLENINDVV EIRDGEEADS LLLAVYTGP
PVKDFVSTTN RMTVLLITND VLARGGFKAN
FTTGYHLGIP EPCKADHFQC KNGECVPLVN
LCDGHLHCED GSDEADCVRV FNGTTNNGL
VRFRIQSIWH TACAENWTTQ ISNDVCQLLG
LGSGNSSKPI FSTDGGPFVK LNTAPDGHLI
LTPSQQCLQD SLIRLQCNHK SCGKKLAAQD
ITPK Light Chain: IVGGSNAKEG
AWPWVVGLEY GGRLLCGASL VSSDWLVSA
HCVYGRNLEP SKWTAILGLH MKSNLTSPQT
VPRLIDEIVI NPHYNRRRKD NDIAMMHLEF**

KVNYTDYIQP ICLPEENQVF PPGRNCSIAG
WGTVVYQGTT ANILQEADVP LLSNERCQQQ
MPEYNITENM ICAGYEEGGI DSCQGDSSGP
LMCQENNRWF LAGVTSFGYK CALPNRPGVY
ARVSRFTEWI QSFLH

Target/Specificity

Enterokinase

Application Notes

Centrifuge the vial prior to opening. Reconstitute in water to a concentration of 0.1-1.0 mg/ml. Do not vortex. This solution can be stored at 2-8°C for up to 1 week. For extended storage, it is recommended to further dilute in a buffer containing a carrier protein (example 0.1% BSA) and store in working aliquots at -20°C to -80°C.

Format

Lyophilized powder

Storage

-20°C; Sterile filtered through a 0.2 micron filter. Lyophilized from 10 mM Sodium Phosphate, pH 7.5 and 1 mM Calcium Chloride.

Enterokinase, human recombinant protein - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Enterokinase, human recombinant protein - Images**Enterokinase, human recombinant protein - Background**

Proteases (also called Proteolytic Enzymes, Peptidases, or Proteinases) are enzymes that hydrolyze the amide bonds within proteins or peptides. Most proteases act in a specific manner, hydrolyzing bonds at or adjacent to specific residues or a specific sequence of residues contained within the substrate protein or peptide. Proteases play an important role in most diseases and biological processes including prenatal and postnatal development, reproduction, signal transduction, the immune response, various autoimmune and degenerative diseases, and cancer. They are also an important research tool, frequently used in the analysis and production of proteins. Enterokinase sequentially cleaves carboxyl side of D-D-D-D-K. Human Enterokinase is expressed as a linear 1019 amino acid polypeptide precursor glycoprotein. Proteolytic processing of this precursor generates the biologically active form of Enterokinase, which consists of two polypeptide chains (heavy chain and light chain) held together by a single disulfide bond, resulting in formation of a biologically active heterodimer. The heavy chain consists of 784 amino acid residues, and the light consists of 235 amino acid residues.

Enterokinase, human recombinant protein - References

Kitamoto Y., et al. Biochemistry 34:4562-4568(1995).
Holzinger A., et al. Am. J. Hum. Genet. 70:20-25(2002).

Hattori M.,et al.Nature 405:311-319(2000).
Kitamoto Y.,et al.Proc. Natl. Acad. Sci. U.S.A. 91:7588-7592(1994).
Simeonov P.,et al.Proteins 80:1907-1910(2012).