

TECHNICAL DATA SHEET

Recombinant Human Enterokinase (Carrier-Free)

Catalog Number: 21-9209

RPx-Pro™ Recombinant Protein PRODUCT INFORMATION

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Recombinant Human Enterokinase (Carrier-Free)

DESCRIPTION

Proteases (also called Proteolytic Enzymes, Peptidases, or Proteinases) are enzymes that hydrolyze the amide bonds within proteins or peptides. 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 chain consists of 235 amino acid residues.

MOLECULAR MASS

The calculated molecular weight of Recombinant Human Enterokinase is 108.7 kDa.

AMINO ACID SEQUENCE

Heavy chain: LTIKESQRGA ALGQSHEARA TFKITSGVTY NPQLQDKLSV DFKVLAFDLQ QMIDEIFLSS NLKNEYKNSR VLQFENGSI VVFDLFFAQW VSDQNVKEEL IQGLEANKSS QLVTFHIDLN SVDILDKLT TSHLATPGNV SIECLPGSSP CTDALTCIKA DLFCDGEVNC PDGSDNENKM CATVCDGRFL LTGSSGSFQA THYPKPSETS VVCQWIIRVN QGLSIKLSFD DFNTYYTDIL DIYEGVGSSK ILRASIWETN PGTIRIFSNQ VTATFLIESD ESDYVGFNAT YTAFNSSELN NYEKINCNE DGFCFWQDL NDDNEWERI Q GSTFSPFTGP NFDHTFGNAS GFYISTPTGP GGRQERVGLL SLPLDPTLEP ACLSFWYHMY GENVHKLSIN ISNDQNMEKT VFQKEGNYGD NWNYGQVTLN ETVKFKVAFN AFKNKILSDI ALDDISLTYG ICNGSLYPEP TLVPTPPPEL PTDCGGPFEL WEPNTTFSST NFPNSYPNLA FCVWILNAQK GKNQLHFQE FDLENINDVV EIRDGEEADS LLLAVYTGPG PVKDFVSTTN RMTVLLITND VLARGGFKAN FTTGYHLGIPEPCKADHFQC KNGECVPLVN LCDGHLHCEG GSEADCVRF FNGTTNNNGL VRFRIQSIWH TACAENWTTQ ISNDVCQLLG LSGSNSSKPI FSTDGGPFVK LNTAPDGHIL TSPQQCLQD SLIRLQCNHK SCGKKLAAQD ITPK

Light Chain: IVGGSNAKEG AWPWVGLYY GGRLLCGASL VSSDWLVSA HCVYGRNLEP SKWTAI LGLH MKSNLTSPQT VPRIDEIVI NPHYNRRRKD NDIAMMHLEF KVNYTDYIQP ICLPEENQVF PPGRNCSIAG WGTVVYQGGT ANILQEADVP LLSNERCQQQ MPEYNITENM ICAGYEEGGI DSCQGDSSGGP LMCQENNRWF LAGVTSFGYK CALPNRPGVY ARVSRFTEWI QSFLH

SOURCE

CHO cells

APPLICATIONS

Bioassay

PURITY

90 %

STORAGE

-20°C

PROTEIN CONTENT

Content Verified by UV Spectroscopy and/or SDS-PAGE gel.

ENDOTOXIN LEVEL

Endotoxin level is <0.1 ng/μg of protein (<1EU/μg).

AUTHENTICITY

Verified by N-terminal and Mass Spectrometry analyses (when applicable).

CROSS REACTIVITY

N/A

BIOACTIVITY

Sequentially cleaves carboxyl side of D-D-D-D-K.

RESEARCH AREAS

Immune System

RECONSTITUTION

See Certificate of Analysis (COA) for lot specific reconstitution information.

REFERENCES

Grunina TM, Demidenko AV, Lyaschuk AM, Poponova MS, Galushkina ZM, Soboleva LA, Cherepushkin SA, Polyakov NB, Grumov DA, Solovyev AI, Zhukhovitsky VG, Boksha IS, Subbotina ME, Gromov AV, Lunin VG, Karyagina AS. *Biochemistry (Mosc)*. 2017 Nov;82(11):1285-1294. doi: 10.1134/S0006297917110062. Tang X, Wu S, Wang X, Gu Q, Li P. *Protein Expr Purif*. 2017 Oct 14;143:28-33. doi: 10.1016/j.pep.2017.10.008.

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