

Carboxypeptidase B1 Active Protein | CPB1 active protein

Carboxypeptidase B1 Protein, Human, Recombinant (His Tag)

CATALOG #
AAA27761

HOST
HEK293 Cells

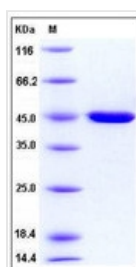
PRODUCT SYNONYMS

Carboxypeptidase B1; Carboxypeptidase B1 Protein; Human; Recombinant (His Tag); Human Carboxypeptidase B1/CPB1 Protein (His Tag); CPB Protein; PASP Protein; PCPB Protein; carboxypeptidase B1 (tissue); CPB1 active protein

PRODUCT SPECIFICATIONS

Host	HEK293 Cells
Purity/Purification	>98% as determined by SDS-PAGE
Form/Format	Lyophilized from sterile 25mM MES, 0.1 M NaCl, pH6.5, 5% trehalose, 5% mannitol and 0.01% Tween80
Sequence	Met1-Tyr417
Source	Human
Activity	Measured by its ability to cleave a colorimetric peptide substrate, Hippuryl-Arg, as measured using the wavelength at 254nm. The specific activity is >1000pmoles/min/ug.
Endotoxin	<1.0EU per ug of the protein as determined by the LAL method
Predicted N Terminal	His 16
Tag	His-Tag
Protein Construction	A DNA sequence encoding the human CPB1 (NP_001862.2)(Met 1-Tyr 417) was expressed with a C-terminal polyhistidine tag.
Reconstitution	It is recommended that sterile water (200ul) be added to the vial to prepare a stock solution of 0.25mg/mL. Concentration is measured by UV.
Preparation and Storage	Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage. Avoid repeated freeze-thaw cycles.

IMAGES



SDS-PAGE

ADDITIONAL INFORMATION

Related Product Information for CPB1 active protein	Background: Carboxypeptidase B1, also well known as pancreatic procarboxypeptidase B (PCPB), is a highly pancreas -specific protein (PASP), and has been identified previously as a serum marker for acute pancreatitis and pancreatic graft rejection. As the prototype for those human exopeptidases that cleave off basic C-terminal residues, CPB1 specifically cleaves the C-terminal Arg and Lys residues with a preference for Arg. The B1 and B2 forms of procarboxypeptidase B differ from each other mainly in isoelectric point.The deduced amino acid sequence of PCPB predicts a 416-amino acid preproenzyme consisting of a 15-aa signal peptide, a 95-aa activation peptide and a 37-aa mature chain. The secreted PCPB zymogen is converted to enzymatically active CPB1 by limited proteolysis by trypsin.
References	Yamamoto, K.K. et al., 1992, J. Biol. Chem. 267: 2575-2581. Pezzilli, R. et al., 1994, Digestion. 55: 73-77. Barbosa Pereira, P.J. et al., 2002, J. Mol. Biol. 321: 537-547.

NCBI AND UNIPROT INFORMATION

NCBI GI #	54607080
NCBI GeneID	1360
NCBI Accession #	NP_001862.2
NCBI GenBank Nucleotide #	NM_001871.2
UniProt Accession #	P15086; O60834; Q53XJ0; Q96BQ8
Molecular Weight	Molecular Mass: The recombinant human CPB1 consists of 413 amino acids and has a predicted molecular mass of 47 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 45 kDa band
NCBI Official Full Name	carboxypeptidase B preproprotein
NCBI Official Synonym Full Names	carboxypeptidase B1
NCBI Official Symbol	CPB1
NCBI Official Synonym Symbols	CPB; PASP; PCPB
NCBI Protein Information	carboxypeptidase B
UniProt Protein Name	Carboxypeptidase B
UniProt Gene Name	CPB1
UniProt Synonym Gene Names	CPB; PCPB; PASP
UniProt Entry Name	CBPB1_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/hek293-cells-cpb1-active-protein/carboxypeptidase-b1/27761>