Recombinant Protein Technical Manual

Recombinant Mouse Carboxypeptidase A1/CPA1 Protein (His Tag)(Active)

RPES2647

Product Data:

Product SKU: RPES2647

Size: 10µg

Species: Mouse

Expression host: HEK293 Cells

Uniprot: NP_079626.2

Protein Information:

Molecular Mass:	47 kDa
AP Molecular Mass:	42 kDa
Tag:	C-His
Bio-activity:	Measured by its ability to cleave the colorimetric peptide substrate Ac-Phe-Thiaphe-OH in the presence of 5,5'Dithiobis (2-nitrobenzoic acid) (DTNB). The specific activity is >6,000 pmoles/min/µg.
Purity:	> 96 % as determined by SDS-PAGE
Endotoxin:	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage:	Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ for 3 months.
Shipping:	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation:	Lyophilized from sterile 20mM Tris, 150mM NaCl, pH 7.5
Reconstitution:	Please refer to the printed manual for detailed information.
Application:	
Synonyms:	0910001L12Rik;Cpa

Immunogen Information:

Sequence: Met 1-Tyr 419

Background:

Carboxypeptidase A1 （CPA1） is secreted as a pancreatic procarboxypeptidase, and cleaves the C-terminal amide or ester bond of peptides that have a free C-terminal carboxyl group, with the preference of residues with aromatic or branched aliphatic side chains. CPA1 comprises a signal peptide, a pro region and a mature chain, and can be activated after cleavage of the pro peptide. In contrast to procarboxypeptidase B which was always secreted by the pancreas as a monomer, procarboxypeptidase A occurs as a monomer and/or associated to one or two functionally different proteins, such as zymogen E, and is involved in zymogen inhibition. Three different forms of human pancreatic procarboxypeptidase A have been isolated.