

Recombinant Human Carboxypeptidase A1/CPA1 Protein (His Tag)

Catalog Number: PKSH031565

Note: Centrifuge before opening to ensure complete recovery of vial contents.

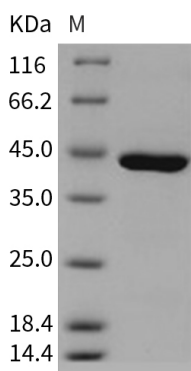
Description

Species	Human
Source	HEK293 Cells-derived Human Carboxypeptidase A1/CPA1 protein Met 1-Tyr 419, with an C-terminal His
Calculated MW	47.0 kDa
Observed MW	43 kDa
Accession	NP_001859.1
Bio-activity	Measured by its ability to cleave the colorimetric peptide substrate Ac-Phe-Thiaphenyl-OH in the presence of 5, 5'-Dithiobis (2-nitrobenzoic acid) (DTNB). The specific activity is > 3, 500 pmoles/min/μg.

Properties

Purity	> 97 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per μg of the protein as determined by the LAL method.
Storage	Generally, 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°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile PBS, pH 7.4 Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization.
Reconstitution	Please refer to the specific buffer information in the printed manual. Please refer to the printed manual for detailed information.

Data



> 97 % as determined by reducing SDS-PAGE.

Background

For Research Use Only

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.