

Recombinant Human Carboxypeptidase A2/CPA2 Protein (His Tag)

Catalog Number: PKSH032169

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

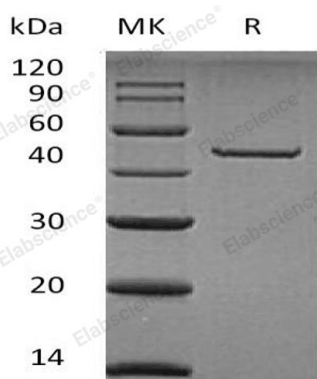
Description

Species	Human
Source	HEK293 Cells-derived Human Carboxypeptidase A2; CPA2 protein Leu17-Tyr417, with an C-terminal His
Calculated MW	45.9 kDa
Observed MW	50 kDa
Accession	AAP36067.1
Bio-activity	Not validated for activity

Properties

Purity	> 95 % 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 a 0.2 µm filtered solution of 20mM Tris-HCl, 150mM NaCl, pH 7.5. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization.
	Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 95 % as determined by reducing SDS-PAGE.

Background

Carboxypeptidase A2 (CPA) is a secreted pancreatic procarboxy-peptidase that cleaves the C-terminal amide or ester bond of peptides that have a free C-terminal carboxyl group. The hydrolytic action of CPA2 was identified with a preference towards long substrates with aromatic amino acids in their C-terminal end, particularly tryptophan. CPA2 comprises a signal peptide, a pro region and a mature chain, and can be activated after cleavage of the pro peptide. Three different forms of human pancreatic procarboxypeptidase A have been isolated, and the A1 and A2 forms are always secreted as monomeric proteins with different biochemical properties. 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.