

## Recombinant Human Carboxypeptidase A2/CPA2 Protein (His Tag)

Catalog No. PKSH032169

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

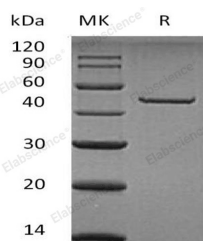
### Description

<b>Synonyms</b>	Carboxypeptidase A2;CPA2
<b>Species</b>	Human
<b>Expression Host</b>	HEK293 Cells
<b>Sequence</b>	Leu17-Tyr417
<b>Accession</b>	AAP36067.1
<b>Calculated Molecular Weight</b>	45.9 kDa
<b>Observed molecular weight</b>	50 kDa
<b>Tag</b>	C-His
<b>Bioactivity</b>	Not validated for activity

### Properties

<b>Purity</b>	> 95 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 1.0 EU per µg of the protein as determined by the LAL method.
<b>Storage</b>	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.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	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.
<b>Reconstitution</b>	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

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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.