

### A Reliable Research Partner in Life Science and Medicine

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

Catalog No. PKSH031569

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

#### **Description**

Synonyms Carboxypeptidase A2;CPA2

Species Human

Expression Host
Sequence
Met 1-Tyr 417
Accession
NP\_001860.2
Calculated Molecular Weight
Observed molecular weight
Tag
HEK293 Cells
Met 1-Tyr 417
Accession
NP\_001860.2
Calculated Molecular Weight
46.0 kDa
C-His

**Bioactivity** Measured by its ability to cleave a colorimetric peptide substrate, N-acetyl-Phe-

Thiaphe-OH (N-Ac-PSP, Peptide International's Catalog# STP-3621-PI), in the presence of 5, 5'Dithio-bis (2-nitrobenzoic acid) (DTNB), as measured using the wavelength at 405 nm and the extinction coefficient of 13, 260 M-1 cm-The

specific activity is > 4, 000 pmoles/min/µg.

### **Properties**

**Purity** > 90 % as determined by reducing SDS-PAGE.

**Endotoxin**  $< 1.0 \text{ EU per } \mu \text{g of the protein as determined by the LAL method.}$ 

**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 25mM Tris, 0.15mM NaCl, pH 7.4

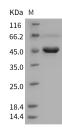
Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as

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



> 90 % as determined by reducing SDS-PAGE.

#### For Research Use Only

Toll-free: 1-888-852-8623 Tel: 1-832-243-6086 Fax: 1-832-243-6017

Web: www.elabscience.com





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# **Background**

Carboxypeptidase A2 (CPA2) is a secreted pancreatic procarboxy -peptidase, and 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.

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