

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

**Catalog Number:** PKSH031569

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

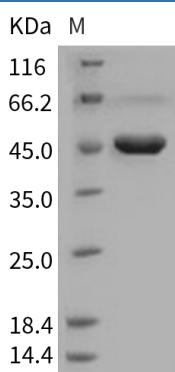
### Description

|                      |   |
|----------------------|---|
| <b>Species</b>       | Human   |
| <b>Source</b>        | HEK293 Cells-derived Human Carboxypeptidase A2/CPA2 protein Met 1-Tyr 417, with an C-terminal His   |
| <b>Calculated MW</b> | 46.0 kDa  |
| <b>Observed MW</b>   | 46 kDa  |
| <b>Accession</b>     | NP_001860.2   |
| <b>Bio-activity</b>  | 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 <sup>-1</sup> cm <sup>-1</sup> . The specific activity is > 4, 000 pmoles/min/μg. |

### Properties

|                       |  |
|-----------------------|--|
| <b>Purity</b>         | > 90 % 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 sterile 25mM Tris, 0.15mM NaCl, pH 7.4<br>Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization.<br>Please refer to the specific buffer information in the printed manual. |
| <b>Reconstitution</b> | Please refer to the printed manual for detailed information.   |

### Data



> 90 % as determined by reducing SDS-PAGE.

### Background

### For Research Use Only

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.