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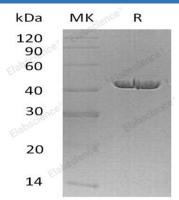
## Recombinant Human Carboxypeptidase A1/CPA1 Protein (His Tag)

## Catalog Number: PKSH032168

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

| Description   |  |
|---------------|--|
| Species       | Human  |
| Source        | HEK293 Cells-derived Human Carboxypeptidase A1;CPA1 protein Lys17-Tyr419, with an C-terminal His |
| Calculated MW | 46.6 kDa   |
| Observed MW   | 44 kDa   |
| Accession     | AAH05279.1   |
| Bio-activity  | Not validated for activity   |
| Properties    |  |
| Purity        | > 95 % as determined by reducing SDS-PAGE.   |
| Concentration | Subject to label value.  |
| Endotoxin     | < 1.0 EU per µg of the protein as determined by the LAL method.                                  |
| Storage       | Store at $< -20^{\circ}$ C, stable for 6 months. Please minimize freeze-thaw cycles.             |
| Shipping      | This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel        |
|               | packs. Upon receipt, store it immediately at $< -20^{\circ}$ C.                                  |
| Formulation   | Supplied as a 0.2 µm filtered solution of 20mM Tris-HCl, 150mm NaCl, pH 7.5.                     |

Data



> 95 % as determined by reducing SDS-PAGE.

## Background

Carboxypeptidase A1 (CPA1) is secreted as a pancreatic peptidase that comes from the precursor form of inactive procarboxypeptidase. CPA1 comprises a signal peptide, a pro region and a mature chain, and can be activated after cleavage of the pro peptide. It has a free C-terminal carboxyl group, with the preference of residues with aromatic or branched aliphatic side chains. CPA1 cleaves the C-terminal amide or ester bond of peptides and involves in zymogen inhibition. Three different forms of human pancreatic procarboxypeptidase A have been isolated. 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.