

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

**Catalog Number:** PKSM040678

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

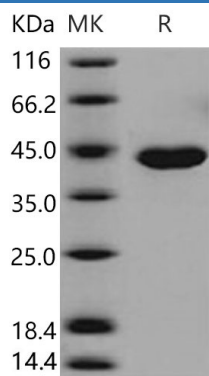
### Description

<b>Species</b>	Mouse
<b>Source</b>	HEK293 Cells-derived Mouse Carboxypeptidase A1/CPA1 protein Met 1-Tyr 419, with an C-terminal His
<b>Calculated MW</b>	47.0 kDa
<b>Observed MW</b>	42 kDa
<b>Accession</b>	NP_079626.2
<b>Bio-activity</b>	Measured by its ability to cleave the colorimetric peptide substrate Ac-Phe-Thiaphenol in the presence of 5, 5'-Dithiobis (2-nitrobenzoic acid) (DTNB). The specific activity is > 6,000 pmoles/min/μg.

### Properties

<b>Purity</b>	> 96 % 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 20mM Tris, 150mM NaCl, pH 7.5 Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization.
<b>Reconstitution</b>	Please refer to the specific buffer information in the printed manual. Please refer to the printed manual for detailed information.

### Data



> 96 % as determined by reducing SDS-PAGE.

### Background

### For Research Use Only

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