



Recombinant Protein Technical Manual
Recombinant Human Carboxypeptidase A1/CPA1
Protein (His Tag)(Active)
RPES3995

Product Data:

Product SKU: RPES3995

Size: 10µg

Species: Human

Expression host: HEK293 Cells

Uniprot: NP_001859.1

Protein Information:

Molecular Mass: 47 kDa

AP Molecular Mass: 43 kDa

Tag: C-His

Bio-activity: Measured by its ability to cleave the colorimetric peptide substrate Ac-Phe-Thiaphe-OH in the presence of 5,5'Dithiobis (2-nitrobenzoic acid) (DTNB). The specific activity is >3,500 pmoles/min/µg.

Purity: > 97 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: 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 PBS, pH 7.4

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: Carboxypeptidase A1; CPA1; CPA

Immunogen Information:

Sequence: Met 1-Tyr 419

Background:

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.