



Recombinant Protein Technical Manual
Recombinant Human Carboxypeptidase A2/CPA2
Protein (His Tag)
RPES4422

Product Data:

Product SKU: RPES4422

Size: 10µg

Species: Human

Expression host: Human Cells

Uniprot: P48052

Protein Information:

Molecular Mass: 45.9 kDa

AP Molecular Mass: 50 kDa

Tag: C-6His

Bio-activity:

Purity: > 95 % 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 a 0.2 µm filtered solution of 20mM TrisHCl, 150mm NaCl, pH 7.5.

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

Application:

Synonyms: Carboxypeptidase A2; CPA2

Immunogen Information:

Sequence: Leu17-Tyr417

Background:

Carboxypeptidase A2 (CPA) is a secreted pancreatic procarboxy-peptidase that 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. 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.