



Recombinant Protein Technical Manual

**Recombinant Mouse Carboxypeptidase B1/CPB1
Protein (His Tag)(Active)**
RPES2536

Product Data:

Product SKU: RPES2536

Size: 10µg

Species: Mouse

Expression host: HEK293 Cells

Uniprot: NP_083982.1

Protein Information:

Molecular Mass: 47.5 kDa

AP Molecular Mass: 43-45 kDa

Tag: C-His

Bio-activity: Measured by its ability to cleave a colorimetric peptide substrate, Hippuryl-Arg. The specific activity is >5,000 pmoles/min/µg.

Purity: > 94 % as determined by SDS-PAGE

Endotoxin: < 1.0 EU per µg of the protein 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 20mM MES, 150mM NaCl, pH 6.5

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

Application:

Synonyms: 0910001A18Rik;1810063F02Rik;2210008M23Rik;AI504870

Immunogen Information:

Sequence: Met 1-Tyr 415

Background:

Carboxypeptidase B1, also well known as pancreatic procarboxypeptidase B (PCPB), is a highly pancreas-specific protein (PASP), and has been identified previously as a serum marker for acute pancreatitis and pancreatic graft rejection. As the prototype for those human exopeptidases that cleave off basic C-terminal residues, CPB1 specifically cleaves the C-terminal Arg and Lys residues with a preference for Arg. The B1 and B2 forms of procarboxypeptidase B differ from each other mainly in isoelectric point. The deduced amino acid sequence of PCPB predicts a 416-amino acid preproenzyme consisting of a 15-aa signal peptide, a 95-aa activation peptide and a 307-aa mature chain. The secreted PCPB zymogen is converted to enzymatically active CPB1 by limited proteolysis by trypsin.