



## Recombinant Protein Technical Manual

**Recombinant Human Carboxypeptidase M/CPM  
Protein (His Tag)(Active)**  
RPES2552

### Product Data:

**Product SKU:** RPES2552

**Size:** 10µg

**Species:** Human

**Expression host:** HEK293 Cells

**Uniprot:** NP\_938079.1

### Protein Information:

**Molecular Mass:** 47.7 kDa

**AP Molecular Mass:** 47.7 kDa

**Tag:** C-His

**Bio-activity:** Measured by its ability to release Larginine from BenzoylAlaArg, with detection of the arginine amino group by ophthaldialdehyde. The specific activity is >40,000 pmoles/min/µg.

**Purity:** > 98 % 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 M;CPM

## Immunogen Information:

**Sequence:** Met 1-His 422

## Background:

Carboxypeptidase M, also known as CPM, is a membrane-bound arginine/lysine carboxypeptidase which is a member of the carboxypeptidases family. These enzymes remove C-terminal amino acids from peptides and proteins and exert roles in the physiological processes of blood coagulation/fibrinolysis, inflammation, food digestion and pro-hormone and neuropeptide processing. Among the carboxypeptidases CPM is of particular importance because of its constitutive expression in an active form at the surface of specialized cells and tissues in the human body. CPM in the brain appears to be membrane-bound via a phosphatidylinositol glycan anchor. CPM is widely distributed in a variety of tissues and cells. The amino acid sequence of CPM indicated that the C-terminal hydrophobic region might be a signal for membrane attachment via a glycosylphosphatidylinositol (GPI) anchor. CPM is involved in peptide metabolism on both the cell surface and in extracellular fluids. CPM functions not only as a protease but also as a binding partner in cell-surface protein-protein interactions.