

Recombinant Human Carboxypeptidase M/CPM Protein (His Tag)

Catalog No. PKSH031189

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

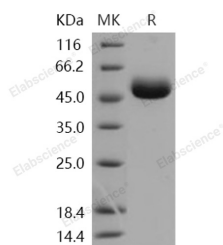
Description

Synonyms	Carboxypeptidase M;CPM
Species	Human
Expression Host	HEK293 Cells
Sequence	Met 1-His 422
Accession	NP_938079.1
Calculated Molecular Weight	47.7 kDa
Observed molecular weight	47.7 kDa
Tag	C-His
Bioactivity	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.

Properties

Purity	> 98 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per μg of the protein as determined by the LAL method.
Storage	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.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile PBS, pH 7.4 Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 98 % as determined by reducing SDS-PAGE.

Background

For Research Use Only

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.