



Recombinant Protein Technical Manual

Recombinant Human MAP1D Protein (His Tag)(Active)
RPES2579

Product Data:

Product SKU: RPES2579

Size: 20µg

Species: Human

Expression host: Baculovirus-Insect Cells

Uniprot: NP_954697.1

Protein Information:

Molecular Mass: 33.4 kDa

AP Molecular Mass: 36 kDa

Tag: C-His

Bio-activity: Measure by its ability to remove methionine from a fluorogenic peptide substrate H-Met-Gly-Pro-AMC, R&D Systems, Catalog#ES017. The resulting GP-AMC is cleaved by human DPPIV/CD26, R&D Systems, Catalog#1180SE. The specific activity is >30 pmoles/min/µg.

Purity: > 92 % 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 50mM Tris, 100mM NaCl, pH 8.0

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

Application:

Synonyms: Methionine Aminopeptidase 1D Mitochondrial; Methionyl Aminopeptidase Type 1D Mitochondrial; METAP1D; MAP1D;MAP 1D;MetAP 1D;Metap1l

Immunogen Information:

Sequence: Arg 44-Ala 335

Background:

Methionine aminopeptidase 1D, also known as MAP1D, is a member of the peptidase M24A family. N-terminal methionine removal is an important cellular process required for proper biological activity, subcellular localization, and eventual degradation of many proteins. The enzymes that catalyze this reaction are called Methionine aminopeptidases (MAPs). MAP1D is overexpressed in colon cancer cell lines and colon tumors as compared to normal tissues (at protein level). Downregulation of MAP1D expression by shRNA in HCT16 colon carcinoma cells reduces anchorage-independent growth in soft agar. MAP1D binds two cobalt ions per subunit. The true nature of the physiological cofactor is under debate. MAP1D is also active with zinc, manganese or divalent ions. MAP1D removes the amino-terminal methionine from nascent proteins. It may also play an important role in colon tumorigenesis.