

Recombinant Mouse METAP2 Protein (His Tag)

Catalog No. PKSM040634

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

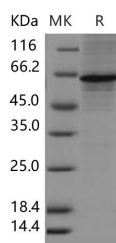
Description

Synonyms	4930584B20Rik;A930035J23Rik;AI047573;AL024412;Amp2;AU014659;Mnpep;p67;p67eIF2
Species	Mouse
Expression Host	Baculovirus-Insect Cells
Sequence	Ala 2-Tyr 478
Accession	O08663
Calculated Molecular Weight	54.3 kDa
Observed molecular weight	60 kDa
Tag	C-His
Bioactivity	Measured by its ability to remove methionine from a fluorogenic peptide substrate H-Met-Gly-Pro-AMC (Catalog # ES017). The resulting GP-AMC is cleaved by Recombinant Human DPPIV/CD26 (Catalog # 1180-SE). The specific activity is > 15 pmol/min/μg

Properties

Purity	> 88 % 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 50mM Tris, 100mM NaCl, pH 8.0, 10% glycerol 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



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Background

METAP2 (Methionine aminopeptidase 2), also known as MAP2 is a protein which belongs to the peptidase M24A family. MAP2 binds 2 cobalt or manganese ions and contains approximately 12 O-linked N-acetylglucosamine (GlcNAc) residues. It is found in all organisms and is especially important because of its critical role in tissue repair and protein degradation. The catalytic activity of human MAP2 toward Met-Val peptides is consistently two orders of magnitude higher than that of METAP1, suggesting that it is responsible for processing proteins containing N-terminal Met-Val and Met-Thr sequences in vivo. This protein functions both by protecting the alpha subunit of eukaryotic initiation factor 2 from inhibitory phosphorylation and by removing the amino-terminal methionine residue from nascent protein. MAP2 protects eukaryotic initiation factor EIF2S1 from translation-inhibiting phosphorylation by inhibitory kinases such as EIF2AK2/PKR and EIF2AK1/HCR. It also plays a critical role in the regulation of protein synthesis.

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