Human METAP1 Protein (His Tag)

Catalog Number: **10241-H08B**

General Information

Gene Name Synonym:

MAP1A; MetAP1A

Protein Construction:

A DNA sequence encoding the human METAP1 (NP_055958.2) (His52-Phe386) was expressed with a polyhistidine tag at the C-terminus and an initial Met at the N-terminus.

Source: Human

Expression Host: Baculovirus-Insect Cells

QC Testing

Purity: > 95 % as determined by SDS-PAGE.

Endotoxin:

< 1.0 EU per μg protein as determined by the LAL method.

Stability:

Samples are stable for up to twelve months from date of receipt at -70 ℃

Predicted N terminal: Met

Molecular Mass:

The recombinant human METAP1 consists 347 amino acids and predicts a molecular mass of 39.3 kDa.

Formulation:

Lyophilized from sterile 20 mM Tris, 500 mM NaCl, pH 8.0, 10 % glycerol.

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Storage:

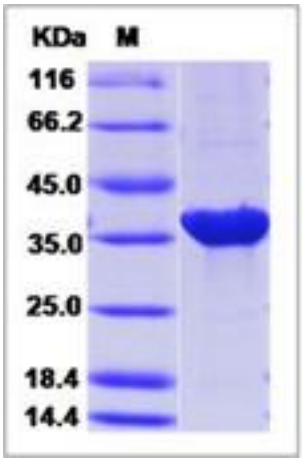
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

Processing of the N-terminal initiator methionine or formylated methionine is an essential cellular process conserved from prokaryotes to eukaryotes. The proteolytic removal of N-terminal methionine from nascent peptides is catalyzed by a family of enzymes known as methionine aminopeptidases (MetAPs) and is essential for cell growth. METAP1 and METAP2 have different substrate specificity due to the differences in both size and shape of the active sites. As a member of the M24 family of metalloproteases, METAP1 plays an important role in G(2)/M phase regulation of the cell cycle and may serve as a promising target for the discovery and development of new anticancer agents.

References

1. Lowther, W.T. and B.W. Matthews, 2000, Biochim. Biophys. Acta. 1477: 157 – 167.
2. Addlaqatta, A. et al., 2005, Biochemistry. 44: 14741-14749.
3. Hu, X. et al., 2006, Proc. Natl. Acad. Sci. U.S.A. 103:18148-18153.