Human PMVK / phosphomevalonate kinase Protein (His Tag)

Catalog Number: 14583-H07E

Sino Biological
Biological Solution Specialist

General Information

Gene Name Synonym:

HUMPMKI; PMK; PMKA; PMKASE

Protein Construction:

A DNA sequence encoding the mature form of human PMVK(Q15126) (Met1-Leu192) was expressed with a polyhistidine tag at the N-terminus.

Source: Human

Expression Host: E. coli

QC Testing

Purity: > 90 % as determined by SDS-PAGE

Bio Activity:

Kinase activity untested

Endotoxin:

Please contact us for more information.

Stability:

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

Predicted N terminal: His

Molecular Mass:

The recombinant human PMVK consists of 207 amino acids and predicts a molecular mass of 23.8 KDa. It migrates as an approximately 24 KDa band in SDS-PAGE under reducing conditions.

Formulation:

Supplied as sterile 50mM MOPS, 150mM KCl, 1mM DTT, pH 7.0.

Usage Guide

Storage:

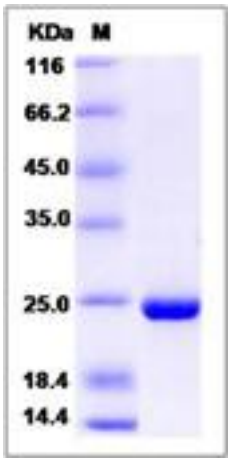
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

PMVK is a peroxisomal enzyme that catalyzes the conversion of mevalonate 5-phosphate into mevalonate 5-diphosphate, the fifth reaction of the cholesterol biosynthetic pathway. Studies in rat show that the message level and the enzyme activity of PMVK is regulated by sterol, and that this regulation is coordinated with 3-hydroxy-3-methylglutaryl coenzyme A reductase, the rate-limiting enzyme of cholesterol biosynthesis.

References

1.Chambliss K.L., *et al.*,(1996), Molecular cloning of human phosphomevalonate kinase and identification of a consensus peroxisomal targeting sequence. J. Biol. Chem. 271:17330-17334. 2.Olivier L.M., *et al.*, (1999), Characterization of phosphomevalonate kinase: chromosomal localization, regulation, and subcellular targeting.J. Lipid Res. 40:672-679. 3.Herdendorf T.J., *et al.*,(2006), Phosphomevalonate kinase: functional investigation of the recombinant human enzyme. Biochemistry 45:3235-3242.