

Recombinant human CMPK1 protein

Catalog Number: ATGP0982

PRODUCT INFORMATION

Expression system

E.coli

Domain

1-228aa

UniProt No.

P30085

NCBI Accession No.

NP_057392.1

Alternative Names

uMP-CMP kinase, CMK, CMPK, RP11-511I2.1, uMK, uMP-CMPK, uMPK

PRODUCT SPECIFICATION

Molecular Weight

28.0 kDa (248aa) confirmed by MALDI-TOF

Concentration

1mg/ml (determined by Bradford assay)

Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 20% glycerol, 1mM DTT, 100mM NaCl

Purity

> 90% by SDS-PAGE

Tag

His-Tag

Application

SDS-PAGE

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description

CMPK1, also known as uMP-CMP kinase and deoxycytidylate kinase, is an enzyme that catalyzes the phosphoryl transfer from ATP to uMP, CMP and dCMP. This enzymatic reaction leads to the formation of ADP and the corresponding nucleoside diphosphate, which are required for cellular nucleic acid synthesis. It also plays an important role in the activation of pyrimidine analogs, which are clinically useful anti-cancer and anti-viral drugs. Recombinant human CMPK1 protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography.

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Amino acid Sequence

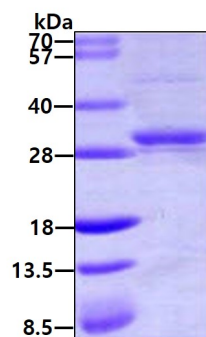
<MGSSHHHHHH SSGLVPRGSH> MLSRCRSGLL HVLGLSFLQ TRRPILLCSP RLMKPLVVFV LGGPGAGKGT
QCARIVEKYG YTHLSAGELL RDERKNPDSQ YGELIEKYIK EGKIVPVEIT ISLLKREMDQ TMAANAQKNK FLIDGFPRNQ
DNLQGWNTM DGKADVSFVL FFDCNNEICI ERCLER GKSS GRSDDNRESL EKRIQTYLQS TKPIIDL YEE MGKVKKIDAS
KSVDEVFDEV VQIFDKEG

General References

Van Rompay A.R., et al. (2000), Pharmacol. Ther.. 87: 189-198.
Liou J.Y., et al. (2002). Cancer Res. 62: 1624-1631.

DATA

SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.