

**AR09922PU-N****Human CMPK1 (1-228, His-tag) - Purified****Alternate names:**

CMK, CMPK, Cytidine monophosphate kinase, Cytidylate kinase, Deoxycytidylate kinase, UCK, UMK, UMP-CMP kinase, UMP/CMP kinase, UMP/CMPK, UMPK, Uridine monophosphate kinase, Uridine monophosphate/cytidine monophosphate kinase

**Quantity:**

0.1 mg

**Concentration:**

1.0 mg/ml (determined by Bradford assay)

**Background:**

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.

**Uniprot ID:**

[P30085](#)

**NCBI:**

[NP\\_001129612](#)

**GeneID:**

[51727](#)

**Species:**

Human

**Source:**

E. coli

**Format:**

**State:** Liquid purified protein

**Purity:** >90%

**Buffer System:** 20mM Tris-HCl buffer (pH 8.0) containing 20% glycerol, 1mM DTT, 100mM NaCl

**Description:**

Recombinant human CMPK1 protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography.

**AA Sequence:**

MGSSHHHHHH SSGLVPRGSH MLSRCSRGLL HVLGLSFLQ TRRPILLCSP RLMKPLVVFV  
LGGPGAGKGT QCARIVEKYG YTHLSAGELL RDERKNPDSQ YGELIEKYIK EGKIVPVEIT  
ISLLKREMDQ TMAANAQKNK FLIDGFPRNQ DNLQGWNTM DGKADVSFVL FFDCNNEICI  
ERCLERKSS GRSDDNRESL EKRIQTYLQS TKPIIDLVEE MGKVKKIDAS KSVDEVFDEV  
VQIFDKEG

**Molecular weight:** kDa (248aa), confirmed by MALDI-TOF

**Storage:**

Store undiluted at 2-8°C for up to two weeks or (in aliquots) at -20°C or -70°C for longer.

Avoid repeated freezing and thawing.

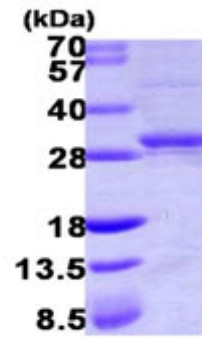
Shelf life: one year from despatch.

**General Readings:**

Van Rompay A.R., et al. (2000), Pharmacol. Ther.. 87: 189-198.

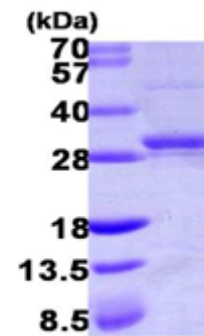
Liou J.Y., et al. (2002). Cancer Res. 62: 1624-1631.

Pictures:



15% SDS-PAGE (3ug)

Recombinant human CMPK1, 1-228aa,  
His-tagged



15% SDS-PAGE (3ug)