For Research Use Only

## UMP/CMP kinase Recombinant monoclonal antibody, PBS Only

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**Purification Method:** 

CloneNo.:

251233A1

Protein A purification

Catalog Number:86475-3-PBS

**Basic Information** 

Catalog Number: GenBank Accession Number:

86475-3-PBS

100ug, Concentration: 1 mg/ml by

Nanodrop: Rabbit

Isotype: cytidine monophosphate (UMP-CMP)

kinase 1, cytosolic IgG Immunogen Catalog Number: Calculated MW: 228 aa, 26 kDa AG1920

> Observed MW: 22 kDa

BC014961

51727

GeneID (NCBI):

**UNIPROT ID:** P30085

Full Name:

**Applications** 

**Tested Applications:** 

WB, Indirect ELISA Species Specificity: human, mouse, rat

## **Background Information**

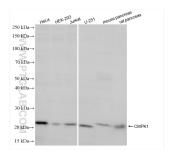
Pyrimidine nucleoside monophosphate kinase [UMP/CMP kinase (UMP/CMPK)] (CMPK1) is also named as CMK, CMPK, UCK, UMK, UMPK and belongs to the adenylate kinase family. It plays a crucial role in the formation of UDP, CDP, and dCDP, which are required for cellular nucleic acid synthesis (PMID:11912132). CMPK1 can use a broad spectrum of phosphate donors but the best phosphate donors are ATP and dATP. CMPK1 has been reported as a prognostic marker for non-small cell lung cancer, pancreatic cancer and breast cancer (PMID: 21642870, 22838950, 27558661). The longest deduced protein contains 228 amino acids and has a calculated molecular mass of 26 kD. However, translation likely begins at the second initiation methionine, resulting in a protein of 196 amino acids(PMID:10462544). The shorter form is the endogenously translated protein(PMID:11912132). CMPK1 has 3 isoforms with the molecular mass of 22, 16 and 26 kDa.

Storage

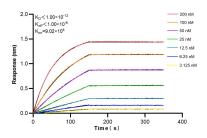
Storage:

Store at -80°C. Storage Buffer: PBS only, pH7.3

## Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 86475-3-RR (CMPK1 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 86475-3-PBS in a different storage buffer formulation.



Biolayer interferometry (BLI) kinetic assays of 86475-3-RR against Human UMP/CMP kinase were performed. The affinity constant is below 1 pM.