

For Research Use Only

# UMP/CMP kinase Polyclonal antibody



Catalog Number: 11360-1-AP **1 Publications**

## Basic Information

<b>Catalog Number:</b> 11360-1-AP	<b>GenBank Accession Number:</b> BC014961	<b>Purification Method:</b> Antigen affinity purification
<b>Size:</b> 150ul , Concentration: 350 µg/ml by Nanodrop and 233 µg/ml by Bradford method using BSA as the standard;	<b>GeneID (NCBI):</b> 51727	<b>Recommended Dilutions:</b> WB 1:500-1:1000 IHC 1:50-1:500 IF 1:50-1:500
<b>Source:</b> Rabbit	<b>Full Name:</b> cytidine monophosphate (UMP-CMP) kinase 1, cytosolic	
<b>Isotype:</b> IgG	<b>Calculated MW:</b> 228 aa, 26 kDa	
<b>Immunogen Catalog Number:</b> AG1920	<b>Observed MW:</b> 22-26 kDa	

## Applications

### Tested Applications:

IF, IHC, WB, ELISA

### Species Specificity:

human, mouse, rat

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

### Positive Controls:

**WB :** mouse pancreas tissue, human pancreas tissue, human skeletal muscle tissue

**IHC :** human lung cancer tissue, human breast cancer tissue

**IF :** HeLa cells,

## Background Information

Pyrimidine nucleoside monophosphate kinase [UMP/CMP kinase (UMP/CMK)] (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 kDa. 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.

## Notable Publications

Author	Pubmed ID	Journal	Application
Víctor Llombart	27888142	J Proteomics	

## Storage

### Storage:

Store at -20°C. Stable for one year after shipment.

### Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

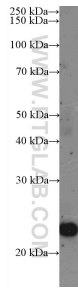
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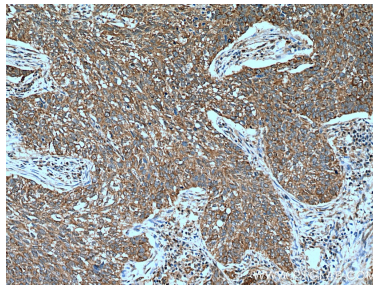
E: proteintech@ptglab.com  
W: ptglab.com

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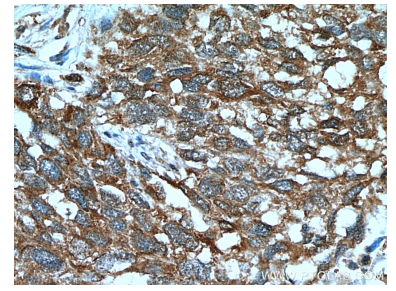
## Selected Validation Data



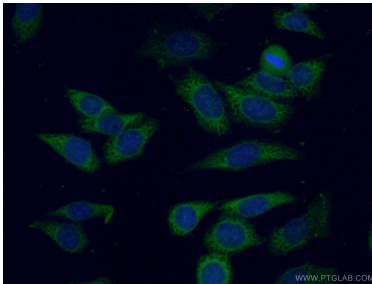
mouse pancreas tissue were subjected to SDS PAGE followed by western blot with 11360-1-AP (UMP/CMP kinase antibody at dilution of 1:600 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 11360-1-AP (UMP/CMP kinase antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 11360-1-AP (UMP/CMP kinase antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Ethanol) fixed HeLa cells using 11360-1-AP (UMP/CMP kinase antibody) at dilution of 1:50 and Alexa Fluor 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).