

For Research Use Only

UMP/CMP kinase Polyclonal antibody

Catalog Number: 11360-1-AP

2 Publications



Basic Information

Catalog Number:

11360-1-AP

Concentration:

350 µg/ml

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG1920

GenBank Accession Number:

BC014961

GeneID (NCBI):

51727

UNIPROT ID:

P30085

Full Name:

cytidine monophosphate (UMP-CMP)
kinase 1, cytosolic

Calculated MW:

228 aa, 26 kDa

Observed MW:

22-26 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB: 1:500-1:1000

IHC: 1:50-1:500

IF/ICC: 1:50-1:500

Applications

Tested Applications:

WB, IHC, IF/ICC, ELISA

Cited Applications:

WB

Species Specificity:

human, mouse, rat

Cited Species:

human

Positive Controls:

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

IHC: human lung cancer tissue, human breast cancer
tissue

IF/ICC: HeLa cells,

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

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 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.

Notable Publications

Author	Pubmed ID	Journal	Application
Victor Llombart	27888142	J Proteomics	
Hannah N Wilkins	39539261	ACS Pharmacol Transl Sci	WB

Storage

Storage:

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

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:

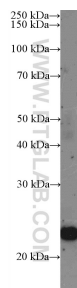
T: 4006900926

E: Proteintech-CN@ptglab.com

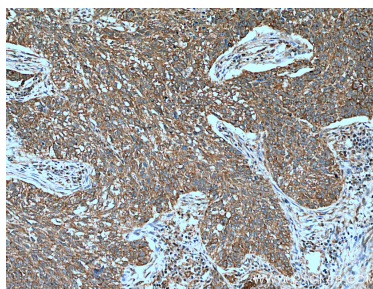
W: ptgcn.com

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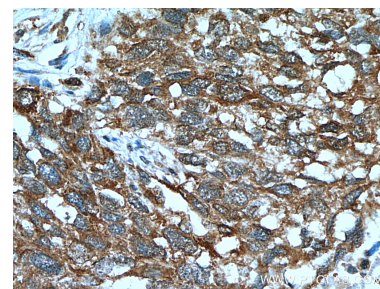
Selected Validation Data



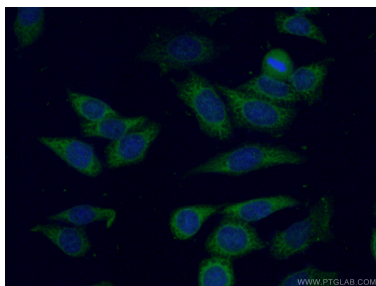
mouse pancreas tissue were subjected to SDS PAGE followed by western blot with 11360-1-AP (UMP/CMP kinase antibody at dilution of 1:600 incubated at room temperature for 1.5 hours.



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 Goat Anti-Rabbit IgG(H+L).