For Research Use Only

UMP/CMP kinase Polyclonal antibody

Catalog Number:11360-1-AP 1 Publications

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Basic Information

Catalog Number:
11360-1-AP

Size:
150ul , Concentration: 350 µg/ml by Nanodrop and 233 µg/ml by Bradford method using BSA as the standard;

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

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/ICC : HeLa cells,

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.

Notable Publications

Author	Pubmed ID	Journal	Application
Víctor Llombart	27888142	J Proteomics	
Ying Chen	39075504	J Exp Clin Cancer Res	IHC

Storage

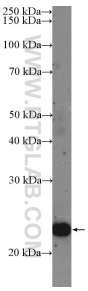
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

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

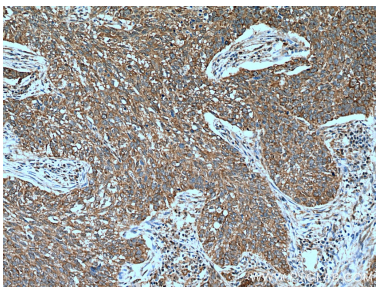
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

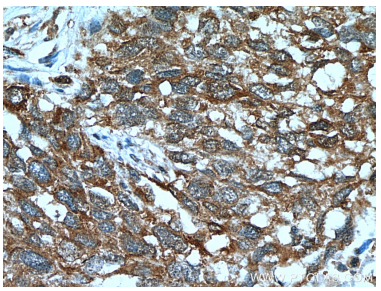
Selected Validation Data



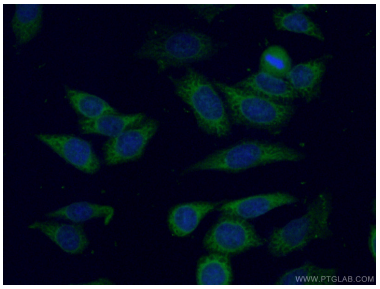
mouse pancreas tissue were subjected to SDS PAGE followed by western blot with 11360-1-AP (UMP/CMP kinase antibody at dilution of 1:600 incubated at room temperature for 1.5 hours.



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).