

For Research Use Only

UMP/CMP kinase Polyclonal antibody

Catalog Number: 11360-1-AP

2 Publications



Basic Information

Catalog Number: 11360-1-AP	GenBank Accession Number: BC014961	Purification Method: Antigen affinity purification
Size: 150ul , Concentration: 350 ug/ml by Nanodrop and 233 ug/ml by Bradford method using BSA as the standard;	GeneID (NCBI): 51727	Recommended Dilutions: WB: 1:500-1:1000 IHC: 1:50-1:500 IF/ICC: 1:50-1:500
Source: Rabbit	UNIPROT ID: P30085	
Isotype: IgG	Full Name: cytidine monophosphate (UMP-CMP) kinase 1, cytosolic	
Immunogen Catalog Number: AG1920	Calculated MW: 228 aa, 26 kDa	
	Observed MW: 22-26 kDa	

Applications

Tested Applications: WB, IHC, IF/ICC, ELISA	Positive Controls:
Cited Applications: WB	WB : mouse pancreas tissue, human pancreas tissue, human skeletal muscle tissue
Species Specificity: human, mouse, rat	IHC : human lung cancer tissue, human breast cancer tissue
Cited Species: human	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)] (CMK1) is also named as CMK, CMK, UCK, UCK, UCK, UCK 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). CMK1 can use a broad spectrum of phosphate donors but the best phosphate donors are ATP and dATP. CMK1 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). CMK1 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

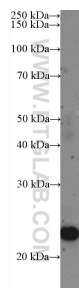
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol, pH7.3
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

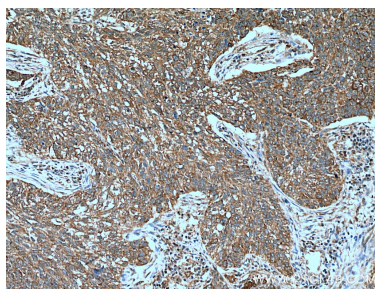
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
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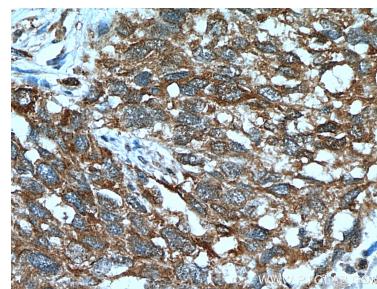
Selected Validation Data



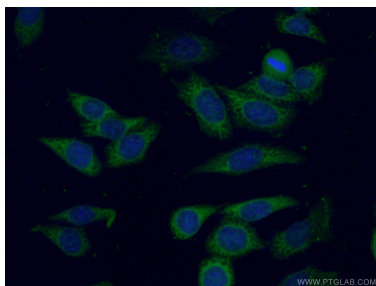
mouse pancreas tissue were subjected to SDS PAGE followed by western blot with 11360-1-AP (UMP/CMP kinase antibody at dilution of 1:600 incubated at room temperature for 1.5 hours.



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).