

For Research Use Only

CMPK2 Polyclonal antibody

Catalog Number: 25877-1-AP

5 Publications



Basic Information

Catalog Number:

25877-1-AP

Concentration:

650 ug/ml

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG22885

GenBank Accession Number:

BC141802

GeneID (NCBI):

129607

UNIPROT ID:

Q5EBM0

Full Name:

cytidine monophosphate (UMP-CMP)
kinase 2, mitochondrial

Calculated MW:

449 aa, 49 kDa

Observed MW:

55 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB 1:1000-1:6000

IHC 1:50-1:500

Applications

Tested Applications:

WB, IHC, ELISA

Cited Applications:

WB, IHC

Species Specificity:

human, mouse, rat

Cited Species:

human, mouse

**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 brain tissue, rat brain tissue

IHC : human lung cancer tissue,

Background Information

CMPK2 belongs to the thymidylate kinase family. CMPK2 may participate in dUTP and dCTP synthesis in mitochondria. It is able to phosphorylate dUMP, dCMP, CMP, UMP and monophosphates of the pyrimidine nucleoside analogs ddC, dFdC, araC, BVdU and FdUrd with ATP as phosphate donor. Efficacy of CMPK2 is highest for dUMP followed by dCMP; CMP and UMP are poor substrates. CMPK2 may be involved in mtDNA depletion caused by long term treatment with ddC or other pyrimidine analogs.

Notable Publications

| Author | Pubmed ID | Journal | Application |
|--------------|-----------|----------------------|-------------|
| Chuanbin Liu | 40084244 | Int J Med Sci | IHC |
| Jianbing Hao | 39103417 | Sci Rep | WB |
| Ya-Nan Tan | 39078538 | Cell Biochem Biophys | 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:

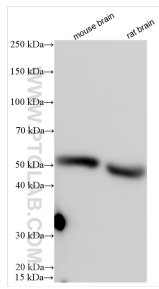
T: 4006900926

E: Proteintech-CN@ptglab.com

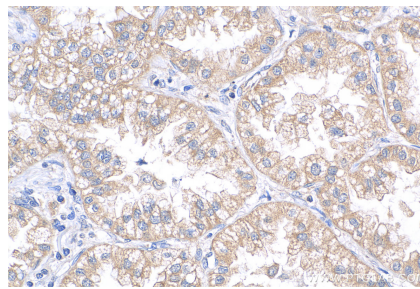
W: ptgcn.com

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Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 25877-1-AP (CMPK2 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 25877-1-AP (CMPK2 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).