

Anti-CMPK1 Antibody

Rabbit polyclonal antibody to CMPK1 Catalog # AP60555

Specification

Anti-CMPK1 Antibody - Product Information

Application WB, IF/IC, IHC
Primary Accession P30085

Other Accession
Reactivity

Ogdbb5

Human, Mouse, Rat, Pig, Bovine

Host Rabbit
Clonality Polyclonal
Calculated MW 22222

Anti-CMPK1 Antibody - Additional Information

Gene ID 51727

Other Names

CMK; CMPK; UCK; UMK; UMP-CMP kinase; Deoxycytidylate kinase; CK; dCMP kinase; Nucleoside-diphosphate kinase; Uridine monophosphate/cytidine monophosphate kinase; UMP/CMP kinase; UMP/CMPK

Target/Specificity

Recognizes endogenous levels of CMPK1 protein.

Dilution

WB~~WB (1/500 - 1/1000), IH (1/100 - 1/200), IF/IC (1/100 - 1/500) IF/IC~~N/A IHC~~1:100~500

Format

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

Storage

Store at -20 °C.Stable for 12 months from date of receipt

Anti-CMPK1 Antibody - Protein Information

Name CMPK1 {ECO:0000255|HAMAP-Rule:MF 03172}

Function

Catalyzes the phosphorylation of pyrimidine nucleoside monophosphates at the expense of ATP. Plays an important role in de novo pyrimidine nucleotide biosynthesis. Has preference for UMP and CMP as phosphate acceptors. Also displays broad nucleoside diphosphate kinase activity.

Cellular Location



Nucleus {ECO:0000255|HAMAP-Rule:MF_03172, ECO:0000269|PubMed:10462544, ECO:0000269|PubMed:11912132}. Cytoplasm {ECO:0000255|HAMAP-Rule:MF_03172, ECO:0000269|PubMed:10462544, ECO:0000269|PubMed:11912132}. Note=Predominantly cytoplasmic, less than 15% nuclear.

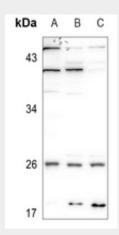
Tissue LocationUbiquitously expressed.

Anti-CMPK1 Antibody - Protocols

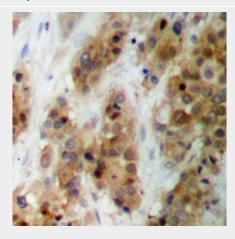
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

Anti-CMPK1 Antibody - Images



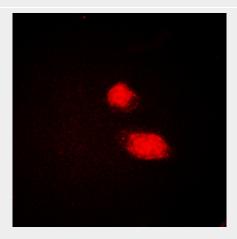
Western blot analysis of CMPK1 expression in HEK293T (A), A549 (B), Hela (C) whole cell lysates.



Immunohistochemical analysis of CMPK1 staining in human breast cancer formalin fixed paraffin



embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of CMPK1 staining in HEK293T cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a DyLight 594-conjugated secondary antibody (red) in PBS at room temperature in the dark.

Anti-CMPK1 Antibody - Background

KLH-conjugated synthetic peptide encompassing a sequence within the N-term region of human CMPK1. The exact sequence is proprietary.