

DATASHEET

CMPK2 Rabbit Polyclonal Antibody

CAT. NO. APA19430

KEY FEATURES

Target	CMPK2	Source / Host	Rabbit
Reactivity	Human	Clonality	Polyclonal
Applications	WB, IHC, FC	Conjugation	Unconjugated
Form / Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.		Storage at -20°C

BACKGROUND

Mitochondrial nucleotide monophosphate kinase needed for salvage dNTP synthesis that mediates immunomodulatory and antiviral activities through IFN-dependent and IFN-independent pathways . Restricts the replication of multiple viruses including flaviviruses or coronaviruses . Together with viperin/RSAD2 and ddhCTP, suppresses the replication of several coronaviruses through inhibition of the viral RNA-dependent RNA polymerase activities . Concerning flaviviruses, restricts RNA translation when localized to the mitochondria independently of its kinase activity . 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.

APPLICATION

To ensure optimal assay performance, AREX recommends conducting reagent titration tailored to each testing system for optimal detection results.

WB	1:500 - 1:1000
IHC	1:50 - 1:200
FC	1:10 - 1:50

*Results are sample-specific. Please refer to your local assay conditions and test parameters for reference.

PRODUCT OVERVIEW

Description	Rabbit polyclonal antibody to CMPK2
Specificity	Recognizes endogenous levels of CMPK2 protein.
Antibody Type	Primary antibody
Immunogen	KLH-conjugated synthetic peptide encompassing a sequence within the Central region of human CMPK2. The exact sequence is proprietary.
Purification	The antibody was purified by immunogen affinity chromatography.
Molecular Weight	Predicted: 49 kD; Observed: 38 kD
Form/Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Alternative Names	UMP-CMP kinase 2, mitochondrial; Nucleoside-diphosphate kinase
Gene Symbol	CMPK2
Entrez Gene	129607(Human)
SwissProt	Q5EBM0(Human)

*AREX continuously optimizes our products. Webpage content may not reflect the latest updates. For inquiries, please contact info@arexbio.com or your local distributor.

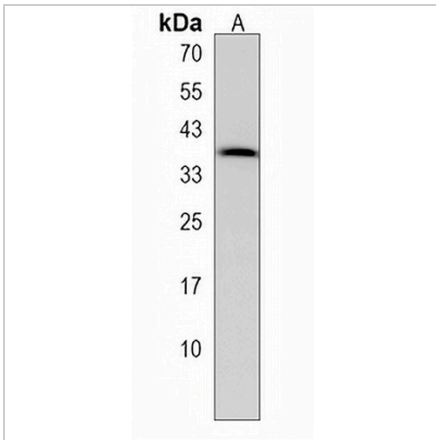
*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

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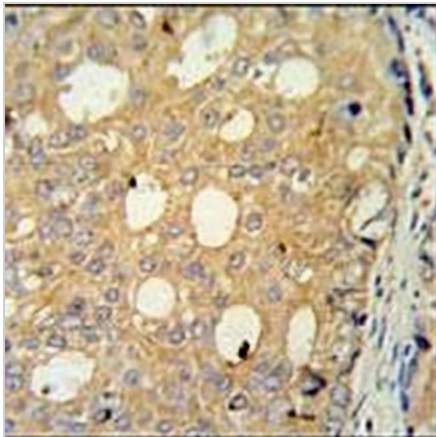
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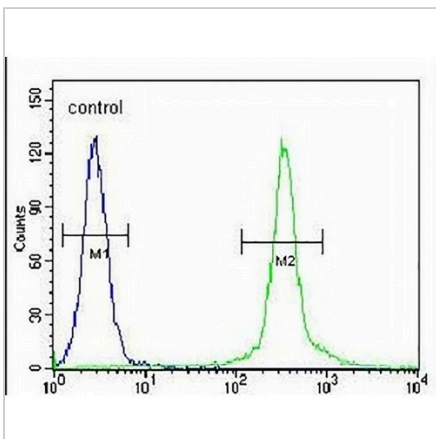
DATA



Western blot analysis of CMPK2 expression in HeLa (A) whole cell lysates. (Predicted band size: 49 kD; Observed band size: 38 kD)



Immunohistochemical analysis of CMPK2 staining in human prostate carcinoma 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.



Flow cytometric analysis of HeLa cells using Anti-CMPK2 Antibody. The cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with 90% methanol for 10 min. The cells were incubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody at 37 °C for 60 min. The secondary antibody Goat Anti-Rabbit IgG (H&L) - AREX® Fluor 488 was incubated at 37 °C for 40 min. Isotype control antibody (blue line) was used under the same condition.

STORAGE

Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.

NOTE

For Research Use Only. Not for diagnostic, therapeutics, prophylactic or in vivo use.