

**DATASHEET**

**CK1 alpha Rabbit Polyclonal Antibody**

CAT. NO. APA08587

**KEY FEATURES**

Target	CK1 alpha	Source / Host	Rabbit
Reactivity	Human, Mouse, Rat, Bovine, Chicken, Rabbit, Sheep	Clonality	Polyclonal
Applications	WB, IHC, IF/ICC	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**

Casein kinases are operationally defined by their preferential utilization of acidic proteins such as caseins as substrates . It can phosphorylate a large number of proteins . Participates in Wnt signaling . Phosphorylates CTNNB1 at 'Ser-45' . May phosphorylate PER1 and PER2 . May play a role in segregating chromosomes during mitosis . May play a role in keratin cytoskeleton disassembly and thereby, it may regulate epithelial cell migration . Acts as a positive regulator of mTORC1 and mTORC2 signaling in response to nutrients by mediating phosphorylation of DEPTOR inhibitor . Acts as an inhibitor of NLRP3 inflammasome assembly by mediating phosphorylation of NLRP3 .

**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	1:100 - 1:200
IF/ICC	1:100 - 1:500

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

**PRODUCT OVERVIEW**

Description	Rabbit polyclonal antibody to CK1 alpha
Specificity	Recognizes endogenous levels of CK1 alpha protein.
Antibody Type	Primary antibody
Immunogen	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human CK1 alpha. The exact sequence is proprietary.
Purification	The antibody was purified by immunogen affinity chromatography.
Molecular Weight	Predicted: 38 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	Casein kinase I isoform alpha; CKI-alpha; CK1
Gene Symbol	CSNK1A1
Entrez Gene	1452(Human); 93687(Mouse); 113927(Rat)
SwissProt	P48729(Human); Q8BK63(Mouse); P97633(Rat)

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

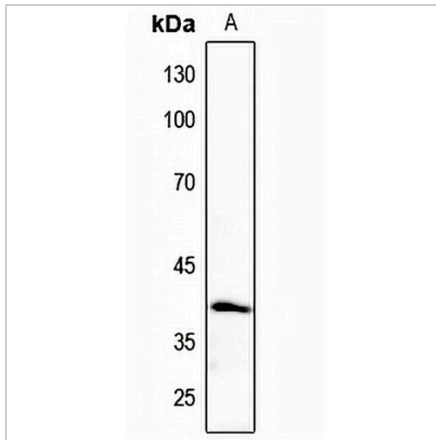
\*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

**DATASHEET**

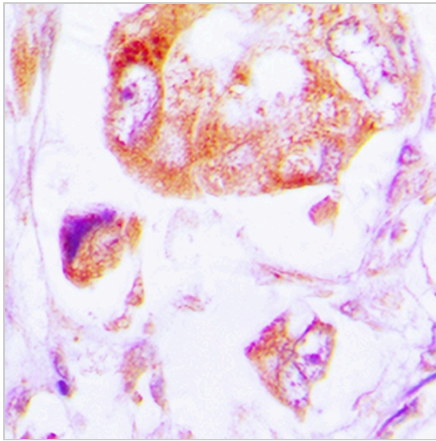
**CK1 alpha Rabbit Polyclonal Antibody**

CAT. NO. APA08587

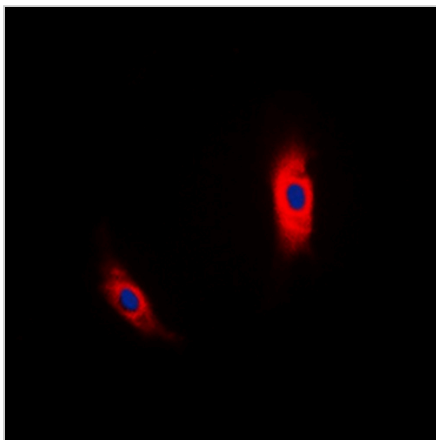
**DATA**



Western blot analysis of CK1 alpha expression in rat lung (A) whole cell lysates. (Predicted band size: 38 kD; Observed band size: 38 kD)



Immunohistochemical analysis of CK1 alpha staining in human lung 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 CK1 alpha staining in MCF7 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 humidified chamber. Cells were washed with PBST and incubated with a DyLight 594-conjugated secondary antibody (red) in PBS at room temperature in the dark. DAPI was used to stain the cell nuclei (blue).

**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.