

DATASHEET

CK1 alpha (Phospho-Y321) Rabbit Polyclonal Antibody

CAT. NO. APA06852

KEY FEATURES

Target	CK1 alpha (Phospho-Y321)	Source / Host	Rabbit
Reactivity	Human, Mouse, Rat, Chicken, Pig, Zebrafish	Clonality	Polyclonal
Applications	WB, IHC	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	1:50 - 1:100

*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 (Phospho-Y321)
Specificity	Recognizes endogenous levels of CK1 alpha protein only when phosphorylated at Y321.
Antibody Type	Primary antibody
Immunogen	KLH-conjugated synthetic phosphopeptide corresponding to residues surrounding Y321 of human CK1 alpha protein. The exact sequence is proprietary.
Purification	The antibody was purified by immunogen affinity chromatography.
Molecular Weight	Predicted: 38 kD; Observed: 45 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 or your local distributor.

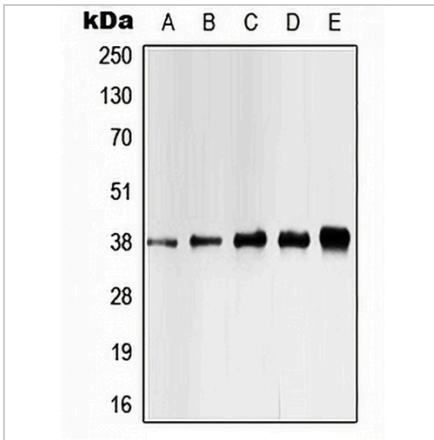
*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

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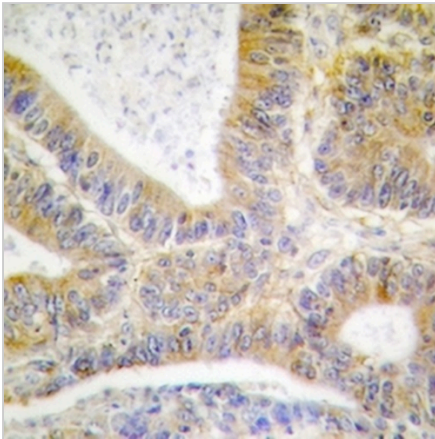
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Western blot analysis of CK1 alpha (Phospho-Y321) expression in HEK293T UV-treated (A), Jurkat (B), K562 (C), mouse liver (D), H9C2 UV-treated (E) whole cell lysates. (Predicted band size: 38 kD; Observed band size: 45 kD)



Immunohistochemical analysis of CK1 alpha (Phospho-Y321) staining in human colon 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.

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.