

# Casein Kinase I $\alpha$ Polyclonal Antibody

Catalog # AP68829

## Product Information

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Application	WB, IHC-P, IF
Primary Accession	<a href="#">P48729</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	38915

## Additional Information

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Gene ID	1452
Other Names	CSNK1A1; Casein kinase I isoform alpha; CKI-alpha; CK1
Dilution	WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/5000. Not yet tested in other applications. IHC-P~~N/A IF~~1:50~200
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20°C

## Protein Information

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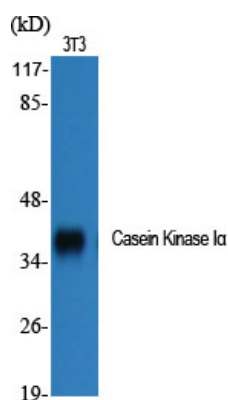
Name	CSNK1A1
Function	Casein kinases are operationally defined by their preferential utilization of acidic proteins such as caseins as substrates (PubMed: <a href="#">11955436</a> , PubMed: <a href="#">1409656</a> , PubMed: <a href="#">18305108</a> , PubMed: <a href="#">23902688</a> ). It can phosphorylate a large number of proteins (PubMed: <a href="#">11955436</a> , PubMed: <a href="#">1409656</a> , PubMed: <a href="#">18305108</a> , PubMed: <a href="#">23902688</a> ). Participates in Wnt signaling (PubMed: <a href="#">11955436</a> ). Phosphorylates CTNNB1 at 'Ser-45' (PubMed: <a href="#">11955436</a> ). May phosphorylate PER1 and PER2 (By similarity). May play a role in segregating chromosomes during mitosis (PubMed: <a href="#">1409656</a> ). May play a role in keratin cytoskeleton disassembly and thereby, it may regulate epithelial cell migration (PubMed: <a href="#">23902688</a> ). Acts as a positive regulator of mTORC1 and mTORC2 signaling in response to nutrients by mediating phosphorylation of DEPTOR inhibitor (PubMed: <a href="#">22017875</a> , PubMed: <a href="#">22017877</a> ). Acts as an inhibitor of NLRP3 inflammasome assembly by mediating phosphorylation of NLRP3 (By similarity).
Cellular Location	Cytoplasm. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Chromosome, centromere, kinetochore. Nucleus speckle.

Cytoplasm, cytoskeleton, cilium basal body  
{ECO:0000250|UniProtKB:Q8BK63}. Cytoplasm, cytoskeleton, spindle  
{ECO:0000250|UniProtKB:Q8BK63}. Note=Localizes to the centrosome in  
interphase cells, and to kinetochore fibers during mitosis. Also recruited to  
the keratin cytoskeleton (PubMed:23902688)

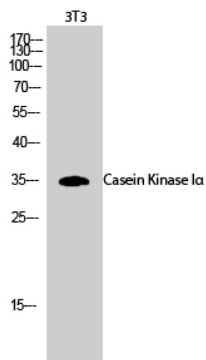
## Background

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 (PubMed:[11955436](#), PubMed:[1409656](#), PubMed:[18305108](#)). May play a role in keratin cytoskeleton disassembly and thereby, it may regulate epithelial cell migration (PubMed:[23902688](#)).

## Images



Western Blot analysis of various cells using Casein Kinase Iα Polyclonal Antibody



Western Blot analysis of 3T3 cells using Casein Kinase Iα Polyclonal Antibody

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.