

# Casein Kinase Iα (phospho Tyr321) Polyclonal Antibody

Catalog # AP67324

## Product Information

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

## Additional Information

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. ELISA: 1/5000. Not yet tested in other applications. IHC-P~~N/A IF~~1:50~200 ICC~~N/A E~~N/A
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20°C

## Protein Information

Name	CSNK1A1
Function	<p>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).</p>
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)

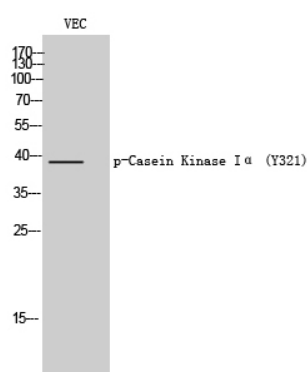
## Background

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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

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Western Blot analysis of VEC cells using Phospho-Casein Kinase Iα (Y321) Polyclonal Antibody

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