

# Casein Kinase Ia (phospho Tyr321) Polyclonal Antibody

Catalog # AP67324

## Product Information

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

## Additional Information

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<b>Gene ID</b>	1452
<b>Other Names</b>	CSNK1A1; Casein kinase I isoform alpha; CKI-alpha; CK1
<b>Dilution</b>	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
<b>Format</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
<b>Storage Conditions</b>	-20°C

## Protein Information

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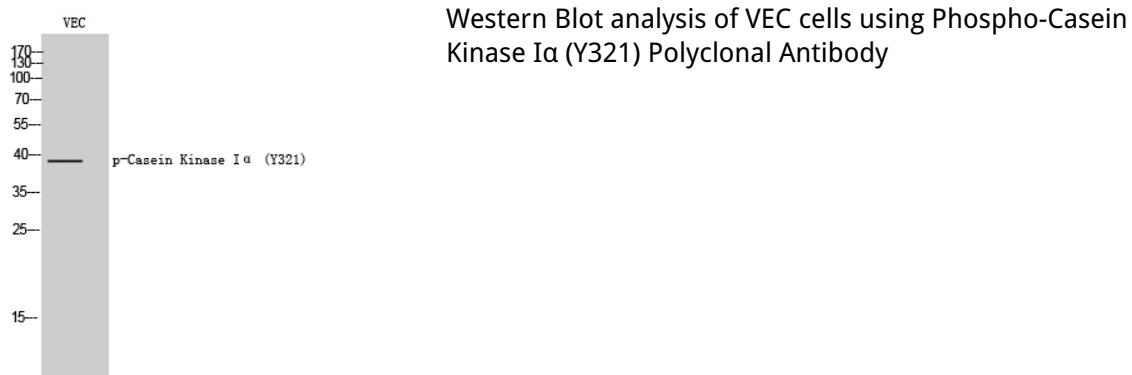
<b>Name</b>	CSNK1A1
<b>Function</b>	Casein kinases are operationally defined by their preferential utilization of acidic proteins such as caseins as substrates (PubMed: <a href="#">11955436</a> , PubMed: <a href="#">1409656</a> , PubMed: <a href="#">18305108</a> , PubMed: <a href="#">23902688</a> ). 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).
<b>Cellular Location</b>	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



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