

Casein Kinase I α (phospho Tyr321) Polyclonal Antibody
Catalog # AP67324**Specification****Casein Kinase I α (phospho Tyr321) Polyclonal Antibody - Product Information**

Application	WB
Primary Accession	P48729
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal

Casein Kinase I α (phospho Tyr321) Polyclonal Antibody - 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.

Format

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

Storage Conditions

-20°C

Casein Kinase I α (phospho Tyr321) Polyclonal Antibody - Protein Information

Name CSNK1A1

Function

Casein kinases are operationally defined by their preferential utilization of acidic proteins such as caseins as substrates (PubMed: [11955436](http://www.uniprot.org/citations/11955436), PubMed: [1409656](http://www.uniprot.org/citations/1409656), PubMed: [18305108](http://www.uniprot.org/citations/18305108), PubMed: [23902688](http://www.uniprot.org/citations/23902688)). It can phosphorylate a large number of proteins (PubMed: [11955436](http://www.uniprot.org/citations/11955436), PubMed: [1409656](http://www.uniprot.org/citations/1409656), PubMed: [18305108](http://www.uniprot.org/citations/18305108), PubMed: [23902688](http://www.uniprot.org/citations/23902688)). Participates in Wnt signaling (PubMed: [11955436](http://www.uniprot.org/citations/11955436)). Phosphorylates CTNNB1 at 'Ser-45' (PubMed: [11955436](http://www.uniprot.org/citations/11955436)). May phosphorylate PER1 and PER2 (By similarity). May play a role in segregating chromosomes during mitosis (PubMed: [1409656](http://www.uniprot.org/citations/1409656))

target="_blank">1409656). May play a role in keratin cytoskeleton disassembly and thereby, it may regulate epithelial cell migration (PubMed:23902688). Acts as a positive regulator of mTORC1 and mTORC2 signaling in response to nutrients by mediating phosphorylation of DEPTOR inhibitor (PubMed:22017875, PubMed:22017877). Acts as an inhibitor of NLRP3 inflammasome assembly by mediating phosphorylation of NLRP3 (By similarity).

Cellular Location

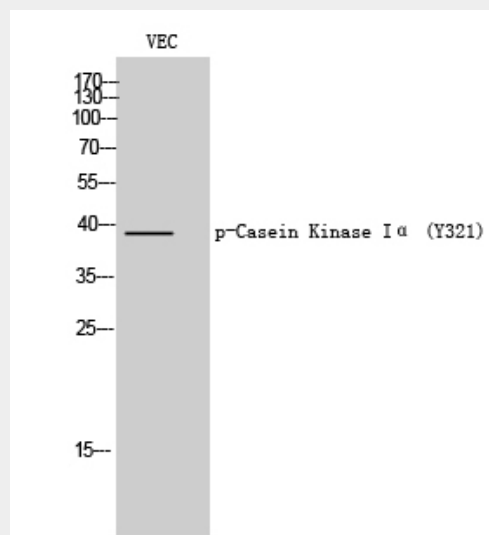
Cytoplasm. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Chromosome, centromere, kinetochore. Nucleus speckle. Cytoplasm, cytoskeleton, cilium basal body {ECO:0000250|UniProtKB:Q8BK63}. Cytoplasm, cytoskeleton, spindle {ECO:0000250|UniProtKB:Q8BK63}. Note=Localizes to the centrosome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

Casein Kinase I α (phospho Tyr321) Polyclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Casein Kinase I α (phospho Tyr321) Polyclonal Antibody - Images



Casein Kinase I α (phospho Tyr321) Polyclonal Antibody - 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).