

**Casein Kinase I $\alpha$  Polyclonal Antibody**  
Catalog # AP68829**Specification****Casein Kinase I $\alpha$  Polyclonal Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">P48729</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal

**Casein Kinase I $\alpha$  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. Immunofluorescence: 1/200 - 1/1000. 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 $\alpha$  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</a>). May play a role in keratin cytoskeleton disassembly and thereby, it may regulate epithelial cell migration (PubMed:<a href="http://www.uniprot.org/citations/23902688" target="\_blank">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="http://www.uniprot.org/citations/22017875" target="\_blank">22017875</a>, PubMed:<a href="http://www.uniprot.org/citations/22017877" target="\_blank">22017877</a>). Acts as an inhibitor of NLRP3 inflammasome assembly by mediating phosphorylation of NLRP3 (By similarity).

#### Cellular Location

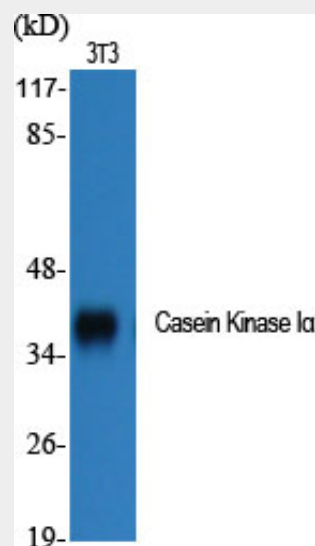
Cytoplasm. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Chromosome, centromere, kinetochore. Nucleus speckle. Cytoplasm, cytoskeleton, cilium basal body {ECO:0000250|UniProtKB:Q8BK63}. Cytoplasm, cytoskeleton, spindle {ECO:0000250|UniProtKB:Q8BK63}. Note=Localizes to the centrosome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

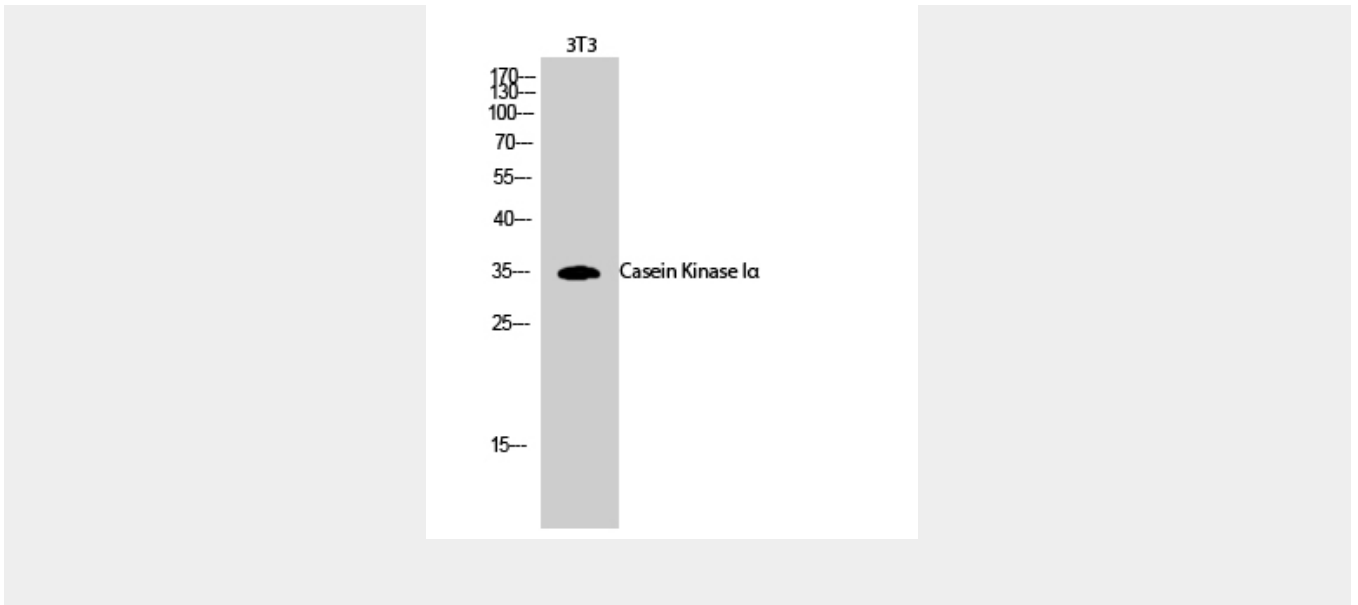
#### Casein Kinase $\alpha$ Polyclonal Antibody - Protocols

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 $\alpha$ Polyclonal Antibody - Images





### Casein Kinase Iα 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).