

Casein Kinase I α Polyclonal Antibody

Catalog # AP68829

Product Information

| | |
|-------------------|------------------------|
| Application | WB, IHC-P, IF |
| Primary Accession | P48729 |
| 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. 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

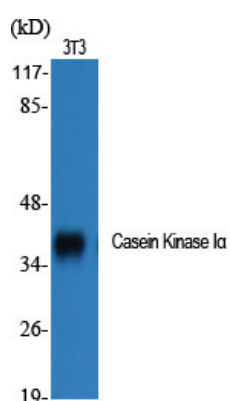
| | |
|-------------------|---|
| Name | CSNK1A1 |
| Function | Casein kinases are operationally defined by their preferential utilization of acidic proteins such as caseins as substrates (PubMed: 11955436 , PubMed: 1409656 , PubMed: 18305108 , PubMed: 23902688). It can phosphorylate a large number of proteins (PubMed: 11955436 , PubMed: 1409656 , PubMed: 18305108 , PubMed: 23902688). Participates in Wnt signaling (PubMed: 11955436). Phosphorylates CTNNB1 at 'Ser-45' (PubMed: 11955436). May phosphorylate PER1 and PER2 (By similarity). May play a role in segregating chromosomes during mitosis (PubMed: 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)

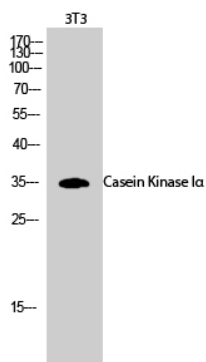
Background

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'.