

Casein Kinase I α Polyclonal Antibody

Catalog # AP73974

Product Information

Application	WB
Primary Accession	P48729
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	38915

Additional Information

Gene ID	1452
Other Names	Casein kinase I isoform alpha (CKI-alpha) (EC 2.7.11.1) (CK1)
Dilution	WB~~WB 1:500-2000, ELISA 1:10000-20000
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20°C

Protein Information

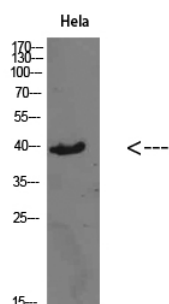
Name	CSNK1A1
Function	<p>Casein kinases are operationally defined by their preferential utilization of acidic proteins such as caseins as substrates (PubMed:11955436, PubMed:1409656, PubMed:18305108, PubMed:23902688). It can phosphorylate a large number of proteins (PubMed:11955436, PubMed:1409656, PubMed:18305108, 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).</p>
Cellular Location	<p>Cytoplasm. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Chromosome, centromere, kinetochore. Nucleus speckle. Cytoplasm, cytoskeleton, cilium basal body {ECO:0000250 UniProtKB:Q8BK63}. Cytoplasm, cytoskeleton, spindle</p>

{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)

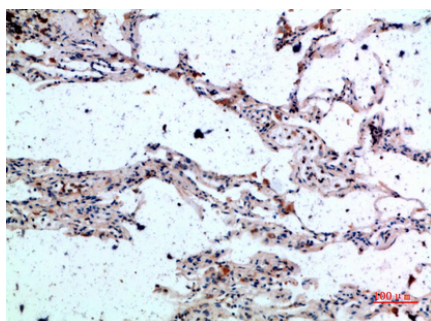
Background

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](#)).

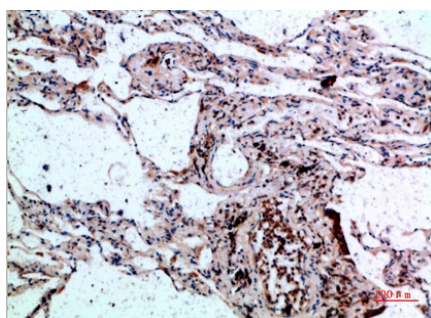
Images



Western Blot analysis of HeLa cells using Casein Kinase Ia Polyclonal Antibody diluted at 1:1000. Secondary antibody was diluted at 1:20000



Immunohistochemical analysis of paraffin-embedded human-lung, antibody was diluted at 1:200



Immunohistochemical analysis of paraffin-embedded human-lung, antibody was diluted at 1:200

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