

CSNK1A1 / CK1 Alpha Antibody
Chicken Polyclonal Antibody
Catalog # ALS16817**Specification**

CSNK1A1 / CK1 Alpha Antibody - Product Information

Application	IHC, ICC, WB
Primary Accession	P48729
Other Accession	1452
Reactivity	Human
Host	Chicken
Clonality	Polyclonal
Isotype	IgY
Calculated MW	38915

CSNK1A1 / CK1 Alpha Antibody - Additional Information**Gene ID** 1452**Other Names**

CSNK1A1, CK1 alpha, CK1a, CK1alpha, Clock regulator kinase, CK1, Casein kinase 1 alpha, CKIa, CKIalpha, Down-regulated in lung cancer, HLCDGP1, PRO2975, Casein kinase 1, alpha 1, Casein kinase I alpha, Casein kinase I isoform alpha, CKI-alpha

Reconstitution & Storage

Liquid. +4°C or -20°C, Avoid repeated freezing and thawing.

Precautions

CSNK1A1 / CK1 Alpha Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

CSNK1A1 / CK1 Alpha Antibody - Protein Information**Name** CSNK1A1**Function**

Casein kinases are operationally defined by their preferential utilization of acidic proteins such as caseins as substrates (PubMed:18305108, PubMed:11955436, PubMed:1409656, PubMed:23902688). It can phosphorylate a large number of proteins (PubMed:18305108, PubMed:11955436, PubMed:1409656, PubMed:23902688). Participates in Wnt signaling (PubMed:11955436). Phosphorylates CTNNB1 at 'Ser-45' (PubMed:<a

[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)). May play a role in keratin cytoskeleton disassembly and thereby, it may regulate epithelial cell migration (PubMed:[23902688](http://www.uniprot.org/citations/23902688)). Acts as a positive regulator of mTORC1 and mTORC2 signaling in response to nutrients by mediating phosphorylation of DEPTOR inhibitor (PubMed:[22017875](http://www.uniprot.org/citations/22017875), PubMed:[22017877](http://www.uniprot.org/citations/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)

Volume

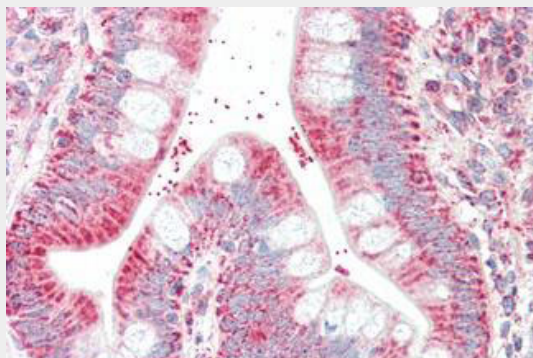
50 µl

CSNK1A1 / CK1 Alpha Antibody - Protocols

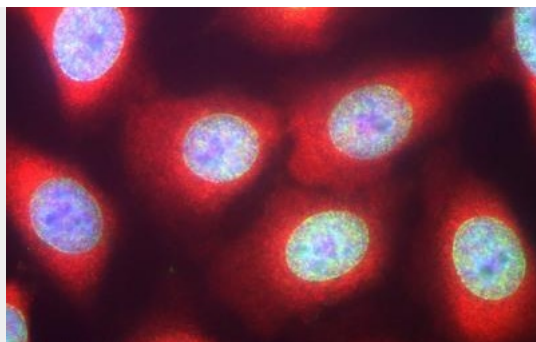
Provided below are standard protocols that you may find useful for product applications.

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

CSNK1A1 / CK1 Alpha Antibody - Images



Anti-CSNK1A1 / CK1 Alpha antibody IHC staining of human small intestine.



High power image of HeLa cells stained with chicken casein kinase 1 alpha antibody (red) and DAPI (blue). The cells show red cytoplasmic staining and blue nuclei.



Western blot of whole rat spinal cord homogenate stained with chicken casein kinase 1 alpha antibody. A single band is visible at 38kDa.

CSNK1A1 / CK1 Alpha 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.

CSNK1A1 / CK1 Alpha Antibody - References

- Tapia C.,et al.FEBS Lett. 349:307-312(1994).
- Fish K.J.,et al.J. Biol. Chem. 270:14875-14883(1995).
- Wan D.,et al.Proc. Natl. Acad. Sci. U.S.A. 101:15724-15729(2004).
- Ota T.,et al.Nat. Genet. 36:40-45(2004).
- Halleck A.,et al.Submitted (JUN-2004) to the EMBL/GenBank/DDBJ databases.