

# Mouse Csnk1a1 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP14783B

## Product Information

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<b>Application</b>	WB, FC, E
<b>Primary Accession</b>	<a href="#">Q8BK63</a>
<b>Other Accession</b>	<a href="#">P39951</a> , <a href="#">P11440</a>
<b>Reactivity</b>	Human, Mouse
<b>Predicted</b>	Rat
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	Rabbit IgG
<b>Clone Names</b>	RB35398
<b>Calculated MW</b>	38915
<b>Antigen Region</b>	309-337

## Additional Information

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<b>Gene ID</b>	93687
<b>Other Names</b>	Casein kinase I isoform alpha, CKI-alpha, CK1, Csnk1a1
<b>Target/Specificity</b>	This Mouse Csnk1a1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 309-337 amino acids from the C-terminal region of mouse Csnk1a1.
<b>Dilution</b>	WB~~1:2000 FC~~1:10~50 E~~Use at an assay dependent concentration.
<b>Format</b>	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
<b>Storage</b>	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
<b>Precautions</b>	Mouse Csnk1a1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

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<b>Name</b>	Csnk1a1
<b>Function</b>	Casein kinases are operationally defined by their preferential utilization of acidic proteins such as caseins as substrates (By similarity). Can phosphorylate a large number of proteins (By similarity). Participates in Wnt

signaling (By similarity). Phosphorylates CTNNB1 at 'Ser-45' (By similarity). May phosphorylate PER1 and PER2 (PubMed:[21930935](#)). May play a role in segregating chromosomes during mitosis (By similarity). May play a role in keratin cytoskeleton disassembly and thereby, it may regulate epithelial cell migration (By similarity). Acts as a positive regulator of mTORC1 and mTORC2 signaling in response to nutrients by mediating phosphorylation of DEPTOR inhibitor (By similarity). Acts as an inhibitor of NLRP3 inflammasome assembly by mediating phosphorylation of NLRP3 (PubMed:[34615873](#)).

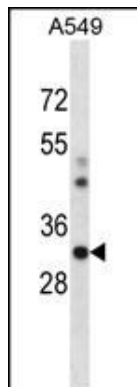
## Cellular Location

Cytoplasm {ECO:0000250|UniProtKB:P48729}. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome {ECO:0000250|UniProtKB:P48729}. Chromosome, centromere, kinetochore {ECO:0000250|UniProtKB:P48729}. Nucleus speckle {ECO:0000250|UniProtKB:P48729}. Cytoplasm, cytoskeleton, cilium basal body. Cytoplasm, cytoskeleton, spindle. Note=Localizes to the centrosome in interphase cells, and to kinetochore fibers during mitosis. Also recruited to the keratin cytoskeleton. {ECO:0000250|UniProtKB:P48729}

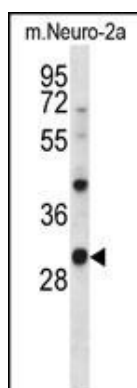
## Background

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 play a role in segregating chromosomes during mitosis (By similarity).

## Images

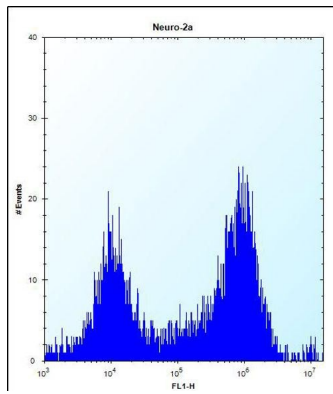


Mouse Csnk1a1 Antibody (C-term) (Cat. #AP14783b) western blot analysis in A549 cell line lysates (35ug/lane). This demonstrates the Csnk1a1 antibody detected the Csnk1a1 protein (arrow).



Mouse Csnk1a1 Antibody (C-term) (Cat. #AP14783b) western blot analysis in mouse Neuro-2a cell line lysates (35ug/lane). This demonstrates the Csnk1a1 antibody detected the Csnk1a1 protein (arrow).

Mouse Csnk1a1 Antibody (C-term) (Cat. #AP14783b) flow cytometric analysis of Neuro-2a cells (right histogram) compared to a negative control cell (left histogram). FITC-conjugated donkey-anti-rabbit secondary antibodies were used for the analysis.



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