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Mouse Csnk1d Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP14707c

Specification

Mouse Csnk1d Antibody (Center) - Product Information

Application	**WB,E**
Primary Accession	Q9DC28
Other Accession	Q9JMK2, P49674, Q5ZLL1, Q5BP74, Q06486, P48730, P35508, Q6P3K7, Q7T2E3, NP_620690.1
Reactivity	**Mouse**
Predicted	**Zebrafish, Bovine, Human, Rat, Xenopus, Chicken**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**47316**
Antigen Region	**204-231**

Mouse Csnk1d Antibody (Center) - Additional Information

Gene ID 104318

Other Names
Casein kinase I isoform delta, CKI-delta, CKId, Tau-protein kinase CSNK1D, Csnk1d, Hckid

Target/Specificity
This Mouse Csnk1d antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 204-231 amino acids from the Central region of mouse Csnk1d.

Dilution
WB~~1:1000
E~~Use at an assay dependent concentration.

Format
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.

Storage
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.

Precautions
Mouse Csnk1d Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Mouse Csnk1d Antibody (Center) - Protein Information

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Name Csnk1d

Synonyms Hckid

Function Essential serine/threonine-protein kinase that regulates diverse cellular growth and survival processes including Wnt signaling, DNA repair and circadian rhythms. It can phosphorylate a large number of proteins. Casein kinases are operationally defined by their preferential utilization of acidic proteins such as caseins as substrates. Phosphorylates connexin-43/GJA1, MAP1A, SNAPIN, MAPT/TAU, TOP2A, DCK, HIF1A, EIF6, p53/TP53, DVL2, DVL3, ESR1, AIB1/NCOA3, DNMT1, PKD2, YAP1, PER1 and PER2. Central component of the circadian clock. In balance with PP1, determines the circadian period length through the regulation of the speed and rhythmicity of PER1 and PER2 phosphorylation. Controls PER1 and PER2 nuclear transport and degradation. YAP1 phosphorylation promotes its SCF(beta-TRCP) E3 ubiquitin ligase-mediated ubiquitination and subsequent degradation. DNMT1 phosphorylation reduces its DNA-binding activity. Phosphorylation of ESR1 and AIB1/NCOA3 stimulates their activity and coactivation. Phosphorylation of DVL2 and DVL3 regulates WNT3A signaling pathway that controls neurite outgrowth. Phosphorylates NEDD9/HEF1 (PubMed:29191835). EIF6 phosphorylation promotes its nuclear export. Triggers down-regulation of dopamine receptors in the forebrain. Activates DCK in vitro by phosphorylation. TOP2A phosphorylation favors DNA cleavable complex formation. May regulate the formation of the mitotic spindle apparatus in extravillous trophoblast. Modulates connexin-43/GJA1 gap junction assembly by phosphorylation. Probably involved in lymphocyte physiology. Regulates fast synaptic transmission mediated by glutamate.

Cellular Location
Cytoplasm. Nucleus. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Cytoplasm, perinuclear region. Cell membrane. Cytoplasm, cytoskeleton, spindle. Golgi apparatus Note=Localized at mitotic spindle microtubules, and at the centrosomes and interphase in interphase cells. Recruited to the spindle apparatus and the centrosomes in response to DNA-damage. Correct subcellular localization requires kinase activity (By similarity).

Tissue Location
Expressed ubiquitously. However, kinase activity is not uniform, with highest kinase activity in splenocytes

Mouse Csnk1d Antibody (Center) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Mouse Csnk1d Antibody (Center) - Images

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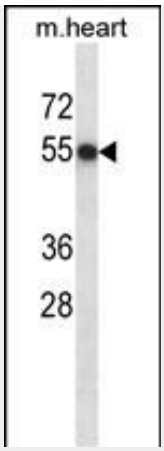

Mouse Csnk1d Antibody (Center) (Cat. #AP14707c) western blot analysis in mouse heart tissue lysates (35ug/lane).This demonstrates the Csnk1d antibody detected the Csnk1d protein (arrow).

Mouse Csnk1d Antibody (Center) - Background

This gene encodes a member of the casein kinase I (CKI) family of serine/threonine protein kinases. A highly similar human protein regulates an array of cellular processes by influencing the Wnt and hedgehog signaling pathways. The encoded protein may also be involved in the regulation of apoptosis, circadian rhythm, microtubule dynamics, chromosome segregation, and p53-mediated effects on growth. Alternatively spliced transcript variants encoding different isoforms have been described. [provided by RefSeq].

Mouse Csnk1d Antibody (Center) - References

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Etchegaray, J.P., et al. PLoS ONE 5 (4), E10303 (2010) :
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Martinez, G., et al. Invest. Ophthalmol. Vis. Sci. 50(10):4794-4806(2009)
Isojima, Y., et al. Proc. Natl. Acad. Sci. U.S.A. 106(37):15744-15749(2009)