

## Mouse Csnk1e Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP14708b

#### Specification

### Mouse Csnk1e Antibody (C-term) - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Isotype Calculated MW Antigen Region WB, IHC-P,E <u>O9JMK2</u> <u>P49674</u>, <u>NP\_038795.3</u> Mouse Human Rabbit Polyclonal Rabbit IgG 47322 283-310

### Mouse Csnk1e Antibody (C-term) - Additional Information

Gene ID 27373

Other Names Casein kinase I isoform epsilon, CKI-epsilon, CKIe, Csnk1e

#### **Target/Specificity**

This Mouse Csnk1e antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 283-310 amino acids from the C-terminal region of mouse Csnk1e.

**Dilution** WB~~1:1000 IHC-P~~1:10~50

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 Csnk1e Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

#### Mouse Csnk1e Antibody (C-term) - Protein Information

Name Csnk1e



**Function** Casein kinases are operationally defined by their preferential utilization of acidic proteins such as caseins as substrates (By similarity). Participates in Wht signaling (By similarity). Phosphorylates DVL1 (By similarity). Phosphorylates DVL2 (By similarity). Phosphorylates NEDD9/HEF1 (PubMed:<u>29191835</u>). Central component of the circadian clock (PubMed:<u>18400165</u>, PubMed:<u>19414593</u>, PubMed:<u>21930935</u>). In balance with PP1, determines the circadian period length, through the regulation of the speed and rhythmicity of PER1 and PER2 phosphorylation (PubMed:<u>18400165</u>, PubMed:<u>19414593</u>, PubMed:<u>19414593</u>, PubMed:<u>21930935</u>). Controls PER1 and PER2 nuclear transport and degradation (PubMed:<u>10848614</u>, PubMed:<u>14701732</u>, PubMed:<u>18400165</u>, PubMed:<u>19414593</u>, PubMed:<u>21930935</u>). Inhibits cytokine-induced granuloytic differentiation (By similarity).

### Cellular Location Cytoplasm. Nucleus

### **Tissue Location**

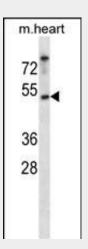
Expressed in all tissues examined, including brain, heart, lung, liver, pancreas, kidney, placenta and skeletal muscle Expressed in monocytes and lymphocytes but not in granulocytes

# Mouse Csnk1e Antibody (C-term) - Protocols

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

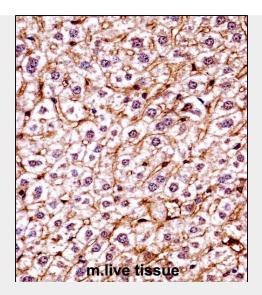
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

#### Mouse Csnk1e Antibody (C-term) - Images



Mouse Csnk1e Antibody (C-term) (Cat. #AP14708b) western blot analysis in mouse heart tissue lysates (35ug/lane). This demonstrates the Csnk1e antibody detected the Csnk1e protein (arrow).





Mouse Csnk1e Antibody (C-term) (AP14708b)immunohistochemistry analysis in formalin fixed and paraffin embedded mouse live tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of Mouse Csnk1e Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.

# Mouse Csnk1e Antibody (C-term) - Background

Casein kinases are operationally defined by their preferential utilization of acidic proteins such as caseins as substrates. Can phosphorylate a large number of proteins. Participates in Wht signaling. Phosphorylates DVL1. Central component of the circadian clock. May act as a negative regulator of circadian rhythmicity by phosphorylating PER1 and PER2. Retains PER1 in the cytoplasm. Inhibits cytokine-induced granuloytic differentiation.

# Mouse Csnk1e Antibody (C-term) - References

Meng, Q.J., et al. Proc. Natl. Acad. Sci. U.S.A. 107(34):15240-15245(2010) Sugiyama, Y., et al. Biochem. J. 427(3):489-497(2010) Etchegaray, J.P., et al. PLoS ONE 5 (4), E10303 (2010) : Lee, H., et al. Proc. Natl. Acad. Sci. U.S.A. 106(50):21359-21364(2009) Isojima, Y., et al. Proc. Natl. Acad. Sci. U.S.A. 106(37):15744-15749(2009)