

# Goat Anti-CSNK1E Antibody

Peptide-affinity purified goat antibody Catalog # AF1282a

#### Specification

# **Goat Anti-CSNK1E Antibody - Product Information**

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Concentration Isotype Calculated MW WB, E P49674 NP\_689407, 1454, 27373 (mouse), 58822 (rat) Human Mouse, Rat, Dog Goat Polyclonal 100ug/200ul IgG 47315

# Goat Anti-CSNK1E Antibody - Additional Information

Gene ID 1454

**Other Names** Casein kinase I isoform epsilon, CKI-epsilon, CKIe, 2.7.11.1, CSNK1E

Dilution WB~~1:1000 E~~N/A

Format

0.5 mg lgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Goat Anti-CSNK1E Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

# Goat Anti-CSNK1E Antibody - Protein Information

Name CSNK1E

**Function** 

Casein kinases are operationally defined by their preferential utilization of acidic proteins such as caseins as substrates (Probable). Participates in Wnt signaling (PubMed:<a



href="http://www.uniprot.org/citations/12556519" target="\_blank">12556519</a>, PubMed:<a
href="http://www.uniprot.org/citations/23413191" target="\_blank">23413191</a>).
Phosphorylates DVL1 (PubMed:<a href="http://www.uniprot.org/citations/12556519"
target="\_blank">12556519</a>). Phosphorylates DVL2 (PubMed:<a
href="http://www.uniprot.org/citations/23413191" target="\_blank">23413191</a>).
Phosphorylates DVL1 (By similarity). Central component of the circadian clock (PubMed:<a/a>).

href="http://www.uniprot.org/citations/16790549" target="\_blank">16790549</a>). In balance with PP1, determines the circadian period length, through the regulation of the speed and rhythmicity of PER1 and PER2 phosphorylation (PubMed:<a

href="http://www.uniprot.org/citations/15917222" target="\_blank">15917222</a>, PubMed:<a href="http://www.uniprot.org/citations/16790549" target="\_blank">16790549</a>). Controls PER1 and PER2 nuclear transport and degradation (By similarity). Inhibits cytokine-induced granuloytic differentiation (PubMed:<a href="http://www.uniprot.org/citations/15070676" target="\_blank">15070676" target="\_blank">15070676</a>).

Cellular Location Cytoplasm. Nucleus.

#### **Tissue Location**

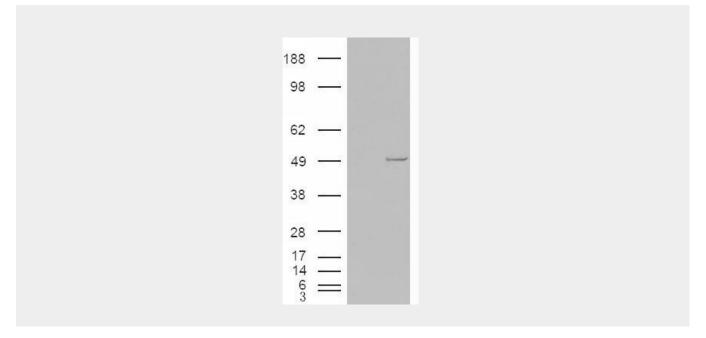
Expressed in all tissues examined, including brain, heart, lung, liver, pancreas, kidney, placenta and skeletal muscle Expressed in monocytes and lymphocytes but not in granulocytes

# Goat Anti-CSNK1E Antibody - Protocols

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

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

#### Goat Anti-CSNK1E Antibody - Images





HEK293 overexpressing CSNK1E (RC202436) and probed with AF1282a (mock transfection in first lane), tested by Origene.

### Goat Anti-CSNK1E Antibody - Background

The protein encoded by this gene is a serine/threonine protein kinase and a member of the casein kinase I protein family, whose members have been implicated in the control of cytoplasmic and nuclear processes, including DNA replication and repair. The encoded protein is found in the cytoplasm as a monomer and can phosphorylate a variety of proteins, including itself. This protein has been shown to phosphorylate period, a circadian rhythm protein. Two transcript variants encoding the same protein have been found for this gene.

### **Goat Anti-CSNK1E Antibody - References**

Variation at the NFATC2 Locus Increases the Risk of Thiazolinedinedione-Induced Edema in the Diabetes REduction Assessment with ramipril and rosiglitazone Medication (DREAM) Study. Bailey SD, et al. Diabetes Care, 2010 Jul 13. PMID 20628086.

Centrosome-related genes, genetic variation, and risk of breast cancer. Olson JE, et al. Breast Cancer Res Treat, 2010 May 28. PMID 20508983.

Systematic analysis of circadian genes in a population-based sample reveals association of TIMELESS with depression and sleep disturbance. Utge SJ, et al. PLoS One, 2010 Feb 18. PMID 20174623.

Differential association of circadian genes with mood disorders: CRY1 and NPAS2 are associated with unipolar major depression and CLOCK and VIP with bipolar disorder. Soria V, et al. Neuropsychopharmacology, 2010 May. PMID 20072116.

A coordinated phosphorylation by Lats and CK1 regulates YAP stability through SCF(beta-TRCP). Zhao B, et al. Genes Dev, 2010 Jan 1. PMID 20048001.