

Goat Anti-CSNK1E Antibody

Peptide-affinity purified goat antibody Catalog # AF1282a

Specification

Goat Anti-CSNK1E Antibody - Product Information

Application WB, E
Primary Accession P49674

Other Accession NP 689407, 1454, 27373 (mouse), 58822 (rat)

Reactivity Humar

Predicted Mouse, Rat, Dog

Host Goat
Clonality Polyclonal
Concentration 100ug/200ul

Isotype IgG
Calculated MW 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, PubMed:23413191). Phosphorylates DVL1 (PubMed:12556519). Phosphorylates DVL2 (PubMed:23413191). Phosphorylates NEDD9/HEF1 (By similarity). Central component of the circadian clock (PubMed:16790549). In balance with PP1, determines the circadian period length, through the regulation of the speed and rhythmicity of PER1 and PER2 phosphorylation (PubMed:15917222, PubMed:16790549). Controls PER1 and PER2 nuclear transport and degradation (By similarity). Inhibits cytokine-induced granuloytic differentiation (PubMed:15070676).

Cellular Location

Cytoplasm. Nucleus.

Tissue Location

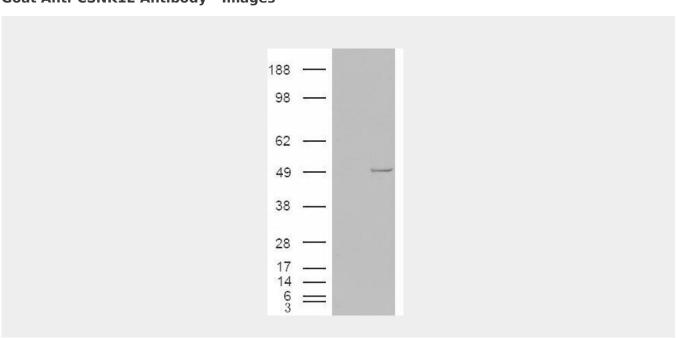
Expressed in all tissues examined, including brain, heart, lung, liver, pancreas, kidney, placenta and skeletal muscle Expressed in monocytes and lymphocytes but not in granulocytes

Goat Anti-CSNK1E Antibody - Protocols

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

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

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.