

### CSNK1E Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP7403a

#### Specification

# **CSNK1E Antibody (C-term) - Product Information**

Application Primary Accession	<b>WB, IHC-P,E</b> P49674
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	331-360

### CSNK1E Antibody (C-term) - Additional Information

Gene ID 102800317;1454

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

**Target/Specificity** This CSNK1E antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 331-360 amino acids from the C-terminal region of human CSNK1E.

**Dilution** WB~~1:1000 IHC-P~~1:50~100

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

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

CSNK1E Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

## 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 (Probable). Participates in Wnt signaling (PubMed:<u>12556519</u>, PubMed:<u>23413191</u>). Phosphorylates DVL1 (PubMed:<u>12556519</u>).



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** 

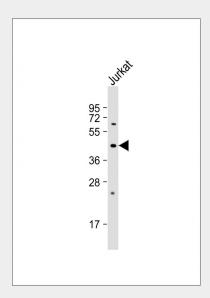
Expressed in all tissues examined, including brain, heart, lung, liver, pancreas, kidney, placenta and skeletal muscle Expressed in monocytes and lymphocytes but not in granulocytes

### CSNK1E Antibody (C-term) - Protocols

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

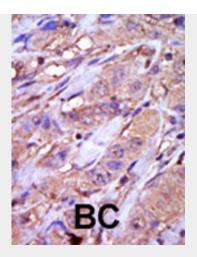
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

CSNK1E Antibody (C-term) - Images



Anti-CSNK1E (E346) at 1:1000 dilution + Jurkat whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 47 kDa Blocking/Dilution buffer: 5% NFDM/TBST.





Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.

### CSNK1E Antibody (C-term) - Background

CK1e 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. This protein is found in the cytoplasm as a monomer and can phosphorylate a variety of proteins, including itself. It has been shown to phosphorylate period, a circadian rhythm protein.

### CSNK1E Antibody (C-term) - References

Hino, S., et al., J. Biol. Chem. 278(16):14066-14073 (2003). Eide, E.J., et al., J. Biol. Chem. 277(19):17248-17254 (2002). Keesler, G.A., et al., Neuroreport 11(5):951-955 (2000). Cegielska, A., et al., J. Biol. Chem. 273(3):1357-1364 (1998). Kloss, B., et al., Cell 94(1):97-107 (1998). CSNK1E Antibody (C-term) - Citations

• Phosphorylation by Akt1 promotes cytoplasmic localization of Skp2 and impairs APCCdh1-mediated Skp2 destruction.