

CSNK1E Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP7403a

Product Information

Application IHC-P, WB, E **Primary Accession** P49674 Reactivity Human Host Rabbit Clonality Polyclonal Isotype Rabbit IgG **Calculated MW** 47315 **Antigen Region** 331-360

Additional Information

Gene ID 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 IHC-P~~1:100~500 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 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.

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: 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

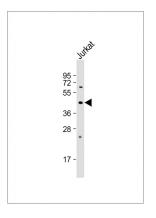
Background

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.

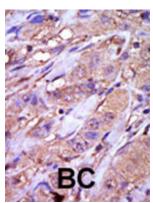
References

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).

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.

Citations

• Progression Risk Score Estimation Based on Immunostaining Data in Oral Cancer Using Unsupervised Hierarchical

Clustering Analysis: A Retrospective Study in Taiwan

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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.