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CSNK1E Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7403a

Product Information

Application	IHC-P, WB, E
Primary Accession	P49674
Reactivity	Human
Predicted	Mouse, Rat, Bovine, Canine, Rabbit
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

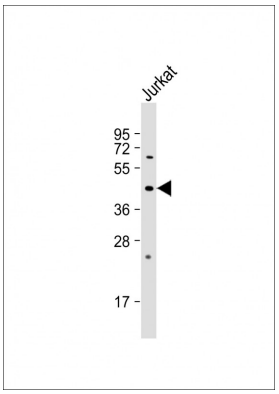
Background

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.

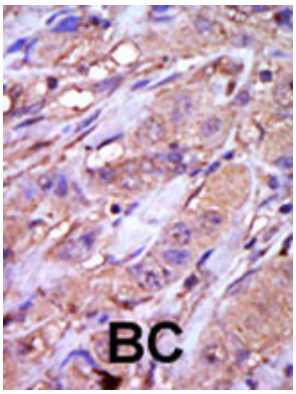
References

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

- Phosphorylation by Akt1 promotes cytoplasmic localization of Skp2 and impairs APCCdh1-mediated Skp2 destruction.
- Progression Risk Score Estimation Based on Immunostaining Data in Oral Cancer Using Unsupervised Hierarchical Clustering Analysis: A Retrospective Study in Taiwan

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