

**Product Name: Casein Kinase Iδ Rabbit Polyclonal Antibody**  
**Catalog #: APRab07946**

---

## Summary

<b>Production Name</b>	Casein Kinase Iδ Rabbit Polyclonal Antibody
<b>Description</b>	Rabbit Polyclonal Antibody
<b>Host</b>	Rabbit
<b>Application</b>	WB,ELISA
<b>Reactivity</b>	Human,Mouse,Rat

## Performance

<b>Conjugation</b>	Unconjugated
<b>Modification</b>	Unmodified
<b>Isotype</b>	IgG
<b>Clonality</b>	Polyclonal
<b>Form</b>	Liquid
<b>Storage</b>	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
<b>Buffer</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
<b>Purification</b>	Affinity purification

## Immunogen

<b>Gene Name</b>	CSNK1D
<b>Alternative Names</b>	CSNK1D; HCKID; Casein kinase I isoform delta; CKI-delta; CKId; Tau-protein kinase
<b>Gene ID</b>	CSNK1D
<b>Gene ID</b>	1453.0
<b>SwissProt ID</b>	P48730.The antiserum was produced against synthesized peptide derived from human CSNK1D. AA range:291-340

## Application

<b>Dilution Ratio</b>	WB 1:500 - 1:2000. ELISA: 1:40000.
<b>Molecular Weight</b>	47kD

**Product Name: Casein Kinase Iδ Rabbit Polyclonal Antibody**  
**Catalog #: APRab07946**



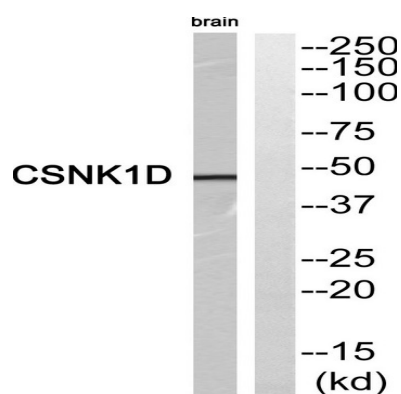
## Background

This gene is a member of the casein kinase I (CKI) gene family whose members have been implicated in the control of cytoplasmic and nuclear processes, including DNA replication and repair. The encoded protein may also be involved in the regulation of apoptosis, circadian rhythm, microtubule dynamics, chromosome segregation, and p53-mediated effects on growth. The encoded protein is highly similar to the mouse and rat CK1 delta homologs. Three transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Feb 2014],catalytic activity:ATP + a protein = ADP + a phosphoprotein.,disease:Defects in CSNK1D are a cause of familial advanced sleep-phase syndrome (FASPS) [MIM:604348]. FASPS is characterized by very early sleep onset and offset. Individuals are 'morning larks' with a 4 hours advance of the sleep, temperature and melatonin rhythms.,enzyme regulation:Exhibits substrate-dependent heparin activation.,function:Casein kinases are operationally defined by their preferential utilization of acidic proteins such as caseins as substrates. It can phosphorylate a large number of proteins. Participates in Wnt signaling. Central component of the circadian clock. May act as a negative regulator of circadian rhythmicity by phosphorylating PER1 and PER2. Retains PER1 in the cytoplasm.,PTM:Autophosphorylated on serine and threonine residues.,similarity:Belongs to the protein kinase superfamily. CK1 Ser/Thr protein kinase family. Casein kinase I subfamily.,similarity:Contains 1 protein kinase domain.,subunit:Monomer. Component of the circadian core oscillator, which includes the CRY proteins, CLOCK, or NPAS2, BMAL1 or BMAL2, CSNK1D and/or CSNK1E, TIMELESS and the PER proteins. Interacts directly with PER1 and PER2 which may lead to their degradation.,tissue specificity:Expressed in all tissues examined, including brain, heart, lung, liver, pancreas, kidney, placenta and skeletal muscle. In blood, highly expressed in hemopoietic cells and mature granulocytes. Also found in monocytes and lymphocytes.,

## Research Area

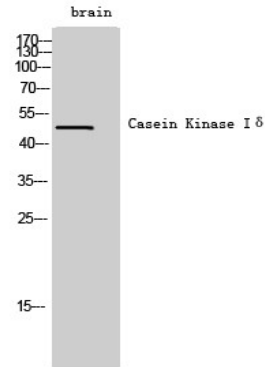
Hedgehog;Gap junction;Circadian rhythm;

## Image Data



Western blot analysis of CSNK1D Antibody. The lane on the right is blocked with the CSNK1D peptide.

**Product Name: Casein Kinase I $\delta$  Rabbit Polyclonal Antibody**  
**Catalog #: APRab07946**



Western Blot analysis of brain cells using Casein Kinase I $\delta$  Polyclonal Antibody

**Note**

For research use only.