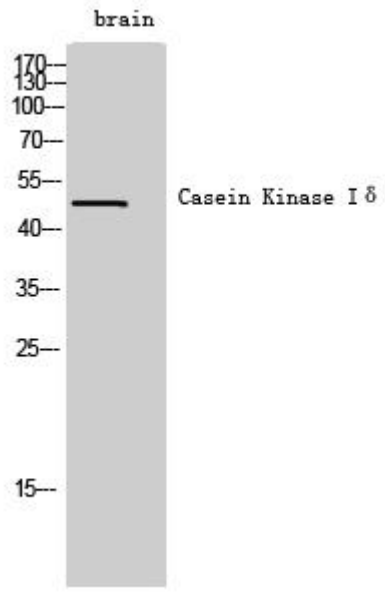
Casein Kinase I δ Monoclonal Antibody

Catalog No	YP-mAb-14701
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB
Gene Name	CSNK1D
Protein Name	Casein kinase I isoform delta
Immunogen	The antiserum was produced against synthesized peptide derived from human CSNK1D. AA range:291-340
Specificity	Casein Kinase I δ Monoclonal Antibody detects endogenous levels of Casein Kinase I δ protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-1:2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	CSNK1D; HCKID; Casein kinase I isoform delta; CKI-delta; CKId; Tau-protein kinase CSNK1D
Observed Band	47kD
Cell Pathway	Cytoplasm. Nucleus. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome . Cytoplasm, perinuclear region. Cell membrane. Cytoplasm, cytoskeleton, spindle. Golgi apparatus. Localized at mitotic spindle microtubules, and at the centrosomes and interphase in interphase cells. Recruited to the spindle apparatus and the centrosomes in response to DNA-damage. Correct subcellular localization requires kinase activity.
Tissue Specificity	Expressed in all tissues examined, including brain, heart, lung, liver, pancreas, kidney, placenta and skeletal muscle. However, kinase activity is not uniform, with highest kinase activity in splenocytes. In blood, highly expressed in hemopoietic cells and mature granulocytes. Also found in monocytes and lymphocytes.
Function	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 prot
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],
matters needing attention	Avoid repeated freezing and thawing!
Usage suggestions	This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Western Blot analysis of various cells using Casein Kinase I δ Monoclonal Antibody