

Summary

Production Name	Casein Kinase IE Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	IF,IHC,WB,
Reactivity	Human, Mouse

Performance

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

Immunogen

Gene Name	CSNK1E
Alternative Names	CSNK1E; Casein kinase I isoform epsilon; CKI-epsilon; CKIe
Gene ID	1454.0
SwissProt ID	P49674.The antiserum was produced against synthesized peptide derived from human
	CKI-epsilon. AA range:276-325

Application

Dilution Ratio	WB 1:500 - 1:2000 IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:20000. Not yet tested
	in other applications.
Molecular Weight	47kD



Background

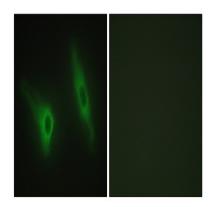
casein kinase 1 epsilon(CSNK1E) Homo sapiens The protein encoded by this gene is a serine/threonine protein kinase and a member of the casein kinase I protein family, whose members have been implicated in the control of cytoplasmic and nuclear processes, including DNA replication and repair. The encoded protein is found in the cytoplasm as a monomer and can phosphorylate a variety of proteins, including itself. This protein has been shown to phosphorylate period, a circadian rhythm protein. Two transcript variants encoding the same protein have been found for this gene. [provided by RefSeq, Feb 2014],catalytic activity:ATP + a protein = ADP + a phosphoprotein.,function:Casein kinases are operationally defined by their preferential utilization of acidic proteins such as caseins as substrates. Can phosphorylate a large number of proteins. Participates in Wnt signaling. Phosphorylates DVL1. 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. Inhibits cytokine-induced granuloytic differentiation.,induction:Down-regulated during granulocytic

differentiation.,PTM:Autophosphorylated.,similarity:Belongs to the protein kinase superfamily.,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. Interacts with ANKRD6 and SOCS3.,tissue specificity: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.,

Research Area

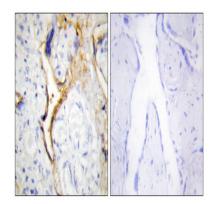
WNT;WNT-T CELLHedgehog;Circadian rhythm;

Image Data

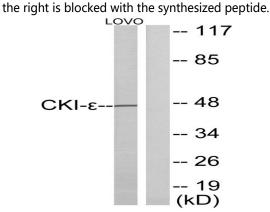


Immunofluorescence analysis of HeLa cells, using CKI-epsilon Antibody. The picture on the right is blocked with the synthesized peptide.

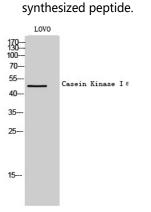




Immunohistochemistry analysis of paraffin-embedded human placenta tissue, using CKI-epsilon Antibody. The picture on



Western blot analysis of lysates from LOVO cells, using CKI-epsilon Antibody. The lane on the right is blocked with the



Western Blot analysis of LOVO cells using Casein Kinase Iz Polyclonal Antibody

Note

For research use only.