

Product Name: Casein Kinase I α (phospho Tyr294) Rabbit Polyclonal Antibody**Catalog #: APRab04363**

For research use only.

Summary

Description	Rabbit polyclonal Antibody
Host	Rabbit
Application	WB,IHC,ICC/IF,ELISA
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Phosphorylated
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:5000-1:20000
Molecular Weight	37kDa

Antigen Information

Gene Name	CSNK1A1
Alternative Names	CSNK1A1; Casein kinase I isoform alpha; CKI-alpha; CK1; CSNK1A1L; Casein kinase I isoform alpha-like; CKI-alpha-like; CK1
Gene ID	1452/122011
SwissProt ID	P48729/Q8N752
Immunogen	The antiserum was produced against synthesized peptide derived from human CK-1 alpha around the phosphorylation site of Tyr294. AA range:260-309

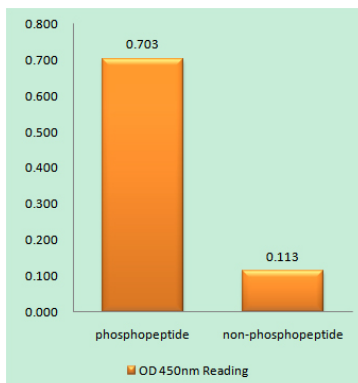
Background

CSNK1A1 (Casein Kinase 1 Alpha 1) is a Protein Coding gene. Among its related pathways are Signaling by GPCR and Infectious disease. GO annotations related to this gene include transferase activity, transferring phosphorus-containing groups and protein tyrosine kinase activity. An important paralog of this gene is CSNK1G2. 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. Phosphorylates CTNNB1 at Ser-45. May phosphorylate PER1 and PER2. May play a role in segregating chromosomes during mitosis (PubMed: 11955436, PubMed: 1409656, PubMed: 18305108). May play a role in keratin cytoskeleton disassembly and thereby, it may regulate epithelial cell migration (PubMed: 23902688). Casein kinase I (CK1) is a monomeric serine-threonine protein kinase with 7 isoforms: alpha, beta, gamma1, gamma2, gamma3, delta and epsilon. CK1 is involved in many cellular processes including DNA repair, cell division, nuclear localization and membrane transport. Isoforms are also integral to development. 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. It can phosphorylate a large number of proteins. Participates in Wnt signaling. Phosphorylates CTNNB1 on 'Ser-45',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. Interacts with the Axin complex.,

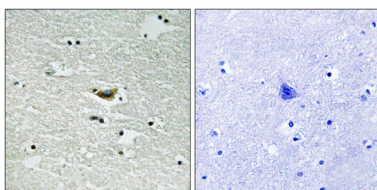
Research Area

WNT;WNT-T CELLHedgehog;

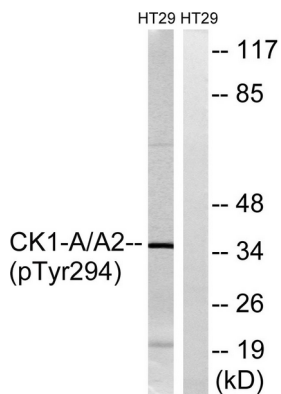
Image Data



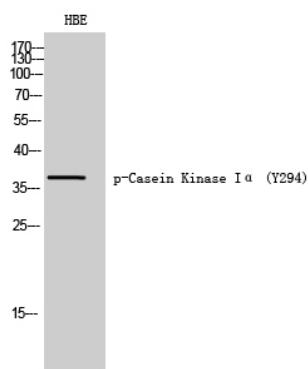
Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right) , using CK-1 alpha (Phospho-Tyr294) Antibody



Immunohistochemistry analysis of paraffin-embedded human brain, using CK-1 alpha (Phospho-Tyr294) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from HT29 cells treated with heat shock, using CK-1 alpha (Phospho-Tyr294) Antibody. The lane on the right is blocked with the phospho peptide.



Western Blot analysis of HBE cells using Phospho-Casein Kinase Iα (Y294) Polyclonal Antibody diluted at 1: 1000