

Rabbit Casein Kinase 1 alpha Polyclonal Antibody | anti-CSNK1A1 antibody

Phospho-Casein Kinase 1 alpha (Tyr294) Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA329273	Rabbit	Human, Mouse, Rat	ELISA, Immunocytochemistry, Immunofluorescence, Immunohistochemistry

PRODUCT SYNONYMS

Casein Kinase 1 alpha; Polyclonal Antibody; Phospho-Casein Kinase 1 alpha (Tyr294) Antibody; Casein kinase 1 alpha 1; Casein kinase I isoform alpha; CK1; CK1A; CKI alpha; CKI-alpha; CKIa; Clock regulator kinase; Csnk1a1; Down regulated in lung cancer; HLCDGP1; KC1A_HUMAN; PRO2975; anti-CSNK1A1 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Phospho-Casein Kinase 1 alpha (Tyr294) Antibody detects endogenous levels of Casein Kinase 1 alpha only when phosphorylated at Tyr294.
Purity/Purification	The antibody is from purified rabbit serum by affinity purification via sequential chromatography on phospho-peptide and non-phospho-peptide affinity columns.
Form/Format	Liquid. Rabbit IgG in phosphate buffered saline, pH7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Applicable Applications for anti-CSNK1A1 antibody	ELISA (Peptide ELISA), ICC (Immunocytochemistry), IF (Immunofluorescence), IHC (Immunohistochemistry)
Immunogen	A synthesized peptide derived from human Casein Kinase 1 alpha around the phosphorylation site of Tyr294.
Conjugation	Unconjugated
Fragment	Fab fragment
Subunit Structure	Monomer. Interacts with the Axin complex. Interacts with TUT1, leading to TUT1 phosphorylation. Interacts with FAM83H; recruits CSNK1A1 to keratin filaments.
Similarity	Belongs to the protein kinase superfamily. CK1 Ser/Thr protein kinase family. Casein kinase I subfamily.
Subcellular Location	Cytoplasm. Cytoplasm>Cytoskeleton>Microtubule organizing center>Centrosome. Chromosome>Centromere>Kinetochore. Nucleus speckle. Cytoplasm>Cytoskeleton>Cilium basal body. Note: Localizes to the centrosome in interphase cells, and to kinetochore fibers during mitosis. Also recruited to the keratin cytoskeleton (PubMed:23902688).
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



Application Data

At 25 degree C. Samples were then incubated with primary Ab(At 37 degree C. An AlexaFluor594 conjugated goat anti-rabbit IgG(H+L) Ab(Red) and an AlexaFluor488 conjugated goat anti-mouse IgG(H+L) Ab(Green) were used as the secondary antibody. The nuclear counter stain is DAPI (blue).



IHC (Immunohistochemistry)

Staining Mouse heart tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the primary antibody at 4 degree C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.



IHC (Immunohistochemistry)

At 1/100 staining Rat heart tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the primary antibody at 4 degree C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.

ADDITIONAL INFORMATION

Related Product Information for anti-CSNK1A1 antibody

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. May play a role in keratin cytoskeleton disassembly and thereby, it may regulate epithelial cell migration.

NCBI AND UNIPROT INFORMATION

NCBI GI #	68303575
NCBI GeneID	1452
NCBI Accession #	NP_001020276.1
NCBI GenBank Nucleotide #	NM_001025105.2
UniProt Accession #	P48729; Q4JJA0; Q5U046; Q5U047; Q6FGA2; Q96HD2; Q9UDK3; D3DQG0; D3DQG1
Molecular Weight	38,915 Da
NCBI Official Full Name	casein kinase I isoform alpha isoform 1
NCBI Official Synonym Full Names	casein kinase 1 alpha 1
NCBI Official Symbol	CSNK1A1
NCBI Official Synonym Symbols	CK1; CK1a; CKIa; HLCDGP1; PRO2975; HEL-S-77p
NCBI Protein Information	casein kinase I isoform alpha
UniProt Protein Name	Casein kinase I isoform alpha
UniProt Gene Name	CSNK1A1
UniProt Synonym Gene Names	CKI-alpha
UniProt Entry Name	KC1A_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.