

**Product Name: Casein Kinase II $\alpha$  Rabbit Polyclonal Antibody****Catalog #: APRab07940**

For research use only.

**Summary**

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

**Application**

<b>Dilution Ratio</b>	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:5000-1:20000
<b>Molecular Weight</b>	45kDa

**Antigen Information**

<b>Gene Name</b>	CSNK2A1
<b>Alternative Names</b>	CSNK2A1; CK2A1; Casein kinase II subunit alpha; CK II alpha
<b>Gene ID</b>	1457.0
<b>SwissProt ID</b>	P68400
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human Casein Kinase II alpha. AA range:221-270

**Background**

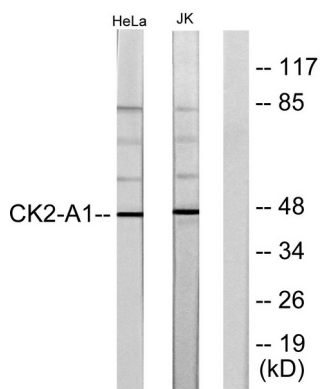
Casein kinase II is a serine/threonine protein kinase that phosphorylates acidic proteins such as casein. It is involved in various

cellular processes, including cell cycle control, apoptosis, and circadian rhythm. The kinase exists as a tetramer and is composed of an alpha, an alpha-prime, and two beta subunits. The alpha subunits contain the catalytic activity while the beta subunits undergo autophosphorylation. The protein encoded by this gene represents the alpha subunit. While this gene is found on chromosome 20, a related transcribed pseudogene is found on chromosome 11. Three transcript variants encoding two different proteins have been found for this gene. [provided by RefSeq, Jul 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. The alpha and alpha' chains contain the catalytic site. Participates in Wnt signaling. CK2 phosphorylates 'Ser-392' of p53/TP53 following UV irradiation.,similarity:Belongs to the protein kinase superfamily.,similarity:Belongs to the protein kinase superfamily. Ser/Thr protein kinase family. CK2 subfamily.,similarity:Contains 1 protein kinase domain.,subunit:Tetramer composed of an alpha chain, an alpha' and two beta chains. Also component of a CK2-SPT16-SSRP1 complex composed of SSRP1, SUPT16H, CSNK2A1, CSNK2A2 and CSNK2B, the complex associating following UV irradiation. Interacts with RNPS1.,

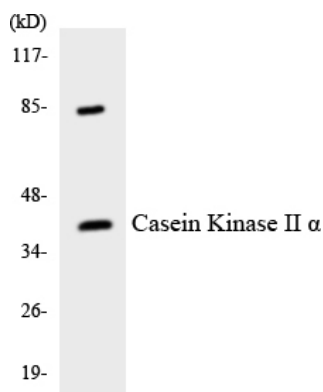
## Research Area

WNT;WNT-T CELLAdherens\_Junction;Adherens\_Junction;

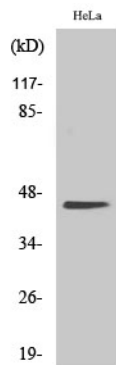
## Image Data



Western blot analysis of lysates from HeLa and Jurkat cells, using Casein Kinase II alpha Antibody. The lane on the right is blocked with the synthesized peptide.



Western blot analysis of the lysates from 293 cells using Casein Kinase II alpha antibody.



Western Blot analysis of various cells using Casein Kinase II $\alpha$  Polyclonal Antibody cells nucleus extracted by Minute TM Cytoplasmic and Nuclear Fractionation kit (SC-003, Invent biotech, MN, USA) .