

## Casein Kinase IIa Polyclonal Antibody

Catalog No: YT0643

**Reactivity:** Human; Mouse; Rat

**Applications:** WB;IHC;IF;ELISA

Target: Casein Kinase IIa

Fields: >>Ribosome biogenesis in eukaryotes;>>NF-kappa B signaling

pathway;>>Mitophagy - animal;>>Wnt signaling pathway;>>Adherens

junction;>>Alzheimer disease;>>Prion disease;>>Pathways of neurodegeneration

- multiple diseases;>>Measles;>>PD-L1 expression and PD-1 checkpoint

pathway in cancer

Gene Name: CSNK2A1

Protein Name: Casein kinase II subunit alpha

P68400

Q60737

Human Gene Id: 1457

**Human Swiss Prot** 

No:

Mouse Gene Id: 12995

**Mouse Swiss Prot** 

No:

**Rat Gene Id:** 116549

Rat Swiss Prot No: P19139

**Immunogen:** The antiserum was produced against synthesized peptide derived from human

Casein Kinase II alpha. AA range:221-270

Specificity: Casein Kinase IIa Polyclonal Antibody detects endogenous levels of Casein

Kinase IIa protein.

**Formulation :** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

1/4



Source: Polyclonal, Rabbit, IgG

**Dilution :** WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:10000.. IF 1:50-200

**Purification:** The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 45kD

**Cell Pathway:** WNT;WNT-T CELLAdherens\_Junction;Adherens\_Junction;

**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],

**Function:** 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

fellowing LIV in a disting the master with DNDO4

following UV irradiation. Interacts with RNPS1.,

Subcellular Location:

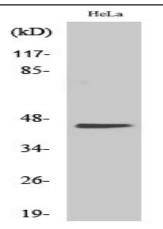
Nucleus.

**Expression:** 

Expressed in gastric carcinoma tissue and the expression gradually increases

with the progression of the carcinoma (at protein level).

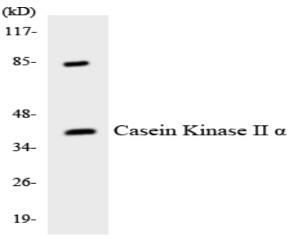
## **Products Images**



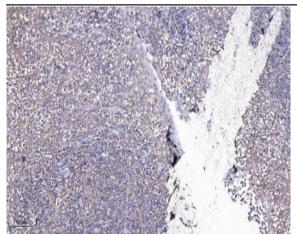
Western Blot analysis of various cells using Casein Kinase IIa Polyclonal Antibody cells nucleus extracted by Minute TM Cytoplasmic and Nuclear Fractionation kit (SC-003,Inventbiotech,MN,USA).



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.



Immunohistochemical analysis of paraffin-embedded human tonsil. 1, Antibody was diluted at 1:200(4° overnight). 2, Tris-EDTA,pH9.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 45min).