# Casein kinase II subunit alpha' Polyclonal Antibody

Catalog No: #42639

Description



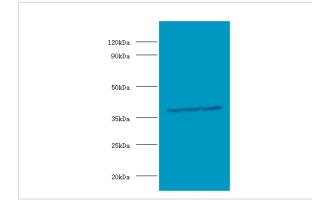
Orders: order@signalwayantibody.com Support: tech@signalwayantibody.com

Description	
Product Name	Casein kinase II subunit alpha' Polyclonal Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Caprylic Acid Ammonium Sulfate Precipitation purified
Applications	WB
Species Reactivity	Hu
Specificity	The antibody detects endogenous level of total Casein kinase II subunit alpha' polyclonal antibody.
Immunogen Type	protein
Immunogen Description	Recombinant human Casein kinase II subunit alpha' protein
Target Name	Casein kinase II subunit alpha'
Other Names	CSNK2A2 CK2A2
Accession No.	Swiss-Prot#: P19784
Uniprot	P19784
GeneID	1459;
Calculated MW	50kd
Formulation	Preservative: 0.03% Proclin 300 Constituents: 50% Glycerol, 0.01M PBS, PH 7.4
Storage	Store at -20°C

## Application Details

Western blotting: 1:500 - 1:1000

# Images



All lanes:Casein kinase II subunit alpha' antibody at 2ug/ml+Hela whole cell lysate lane 1:HepG2 whole cell lysate lane 2:Hela whole cell lysate lane 3:MCF-7 whole cell lysate Secondary Goat polyclonal to Rabbit IgG at 1/15000 dilution Predicted band size:50KDa Observed band size:50KDa

## Background

Catalytic subunit of a constitutively active serine/threonine-protein kinase complex that phosphorylates a large number of substrates containing acidic residues C-terminal to the phosphorylated serine or threonine. Regulates numerous cellular processes, such as cell cycle progression, apoptosis and transcription, as well as viral infection. May act as a regulatory node which integrates and coordinates numerous signals leading to an appropriate cellular response. During mitosis, functions as a component of the p53/TP53-dependent spindle assembly checkpoint (SAC) that maintains

cyclin-B-CDK1 activity and G2 arrest in response to spindle damage. Also required for p53/TP53-mediated apoptosis, phosphorylating 'Ser-392' of p53/TP53 following UV irradiation. Can also negatively regulate apoptosis. Phosphorylates the caspases CASP9 and CASP2 and the apoptotic regulator NOL3. Phosphorylation protects CASP9 from cleavage and activation by CASP8, and inhibits the dimerization of CASP2 and activation of CASP8. Regulates transcription by direct phosphorylation of RNA polymerases I, II, III and IV. Also phosphorylates and regulates numerous transcription factors including NF-kappa-B, STAT1, CREB1, IRF1, IRF2, ATF1, SRF, MAX, JUN, FOS, MYC and MYB. Phosphorylates Hsp90 and its co-chaperones FKBP4 and CDC37, which is essential for chaperone function. Regulates Wnt signaling by phosphorylating CTNNB1 and the transcription factor LEF1. Acts as an ectokinase that phosphorylates several extracellular proteins. During viral infection, phosphorylates various proteins involved in the viral life cycles of EBV, HSV, HBV, HCV, HIV, CMV and HPV.

#### References

[1]"Isolation and characterization of human cDNA clones encoding the alpha and the alpha' subunits of casein kinase II."Lozeman F.J., Litchfield D.W., Piening C., Takio K., Walsh K.A., Krebs E.G. Biochemistry 29:8436-8447(1990) [2]"T

Note: This product is for in vitro research use only