Datasheet for ABIN7146885

anti-CSNK2A1/CK II alpha antibody (AA 1-391)

5 Images

Go to Product page

Overview

Quantity:	100 µg
Target:	CSNK2A1/CK II alpha (CSNK2A1)
Binding Specificity:	AA 1-391
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This CSNK2A1/CK II alpha antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (IHC), Immunoprecipitation (IP), Immunofluorescence (IF)

Product Details

Immunogen:	Recombinant Human Casein kinase II subunit alpha protein (1-391AA)
Isotype:	IgG
Cross-Reactivity:	Human
Purification:	>95%, Protein G purified

Target Details

Target:	CSNK2A1/CK II alpha (CSNK2A1)
Alternative Name:	CSNK2A1 (CSNK2A1 Products)
Background:	Background: Catalytic subunit of a constitutively active serine/threonine-protein kinase complex

Target Details

	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. Phosphorylates PML at \\\'Ser-565\\\' and primes it for ubiquitin-mediated degradation. Plays an important role in the circadian clock function by phosphorylating ARNTL/BMAL1 at \\\'Ser-90\\\' which is pivotal for its interaction with CLOCK and which controls CLOCK nuclear entry. Aliases: Casein kinase 2 alpha 1 polypeptide antibody, Casein kinase II alpha 1 antibody, Casein kinase II alpha 1 subunit antibody, Casein kinase II alpha subunit antibody, Casein kinase II subunit alpha antibody, CK II alpha antibody, CK II antibody, CK2 alpha antibody, CK2 catalytic subunit alpha antibody, CK2A1 antibody, CKII antibody, CKIIalpha antibody, CSK21_HUMAN antibody, CSNK2A1 antibody
UniProt:	P68400
Pathways:	SARS-CoV-2 Protein Interactome

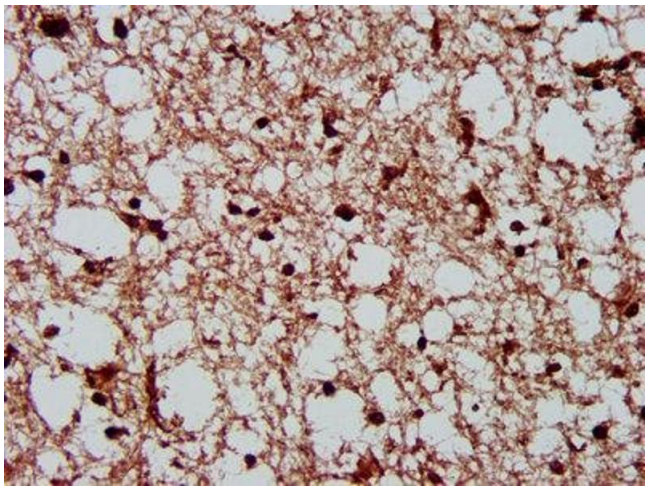
Application Details

Application Notes:	Recommended dilution: WB:1:500-1:5000, IHC:1:200-1:500, IF:1:50-1:200, IP:1:200-1:2000,
Restrictions:	For Research Use only

Handling

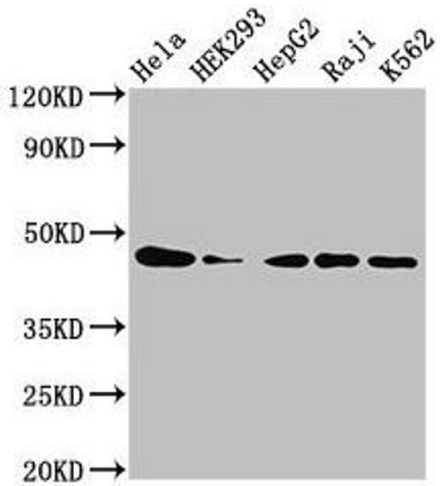
Format:	Liquid
Buffer:	Preservative: 0.03 % Proclin 300 Constituents: 50 % Glycerol, 0.01M PBS, PH 7.4
Preservative:	ProClin
Precaution of Use:	This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C,-80 °C
Storage Comment:	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.

Images



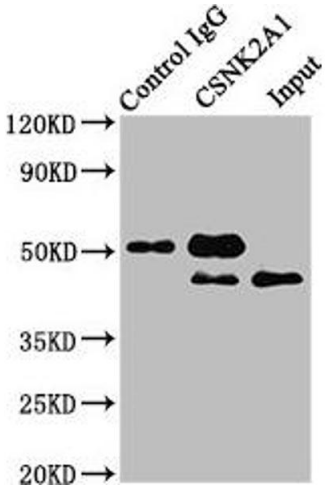
Immunohistochemistry

Image 1. IHC image of ABIN7146885 diluted at 1:300 and staining in paraffin-embedded human brain tissue performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a biotinylated secondary antibody and visualized using an HRP conjugated SP system.



Western Blotting

Image 2. Western Blot Positive WB detected in: Hela whole cell lysate, HEK293 whole cell lysate, HepG2 whole cell lysate, Raji whole cell lysate, K562 whole cell lysate All lanes: CSNK2A1 antibody at 3 µg/mL Secondary Goat polyclonal to rabbit IgG at 1/50000 dilution Predicted band size: 46, 30 kDa Observed band size: 46 kDa



Western Blotting

Image 3. Immunoprecipitating CSNK2A1 in Hela whole cell lysate Lane 1: Rabbit control IgG instead of ABIN7146885 in Hela whole cell lysate. For western blotting, a HRP-conjugated Protein G antibody was used as the secondary antibody (1/2000) Lane 2: ABIN7146885 (8 µg) + Hela whole cell lysate (500 µg) Lane 3: Hela whole cell lysate (10 µg)

Please check the product details page for more images. Overall 5 images are available for ABIN7146885.