Datasheet for ABIN7112347

anti-CSNK2A1/CK II alpha antibody

Go to Product page

Overview

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

Product Details

Immunogen:	casein kinase 2, alpha 1 polypeptide
Isotype:	IgG
Purification:	Immunogen affinity purified
Purity:	≥95 % as determined by SDS-PAGE

Target Details

Target:	CSNK2A1/CK II alpha (CSNK2A1)
Alternative Name:	CSNK2A1 (CSNK2A1 Products)
Background:	Synonyms:Casein kinase II subunit alpha, CK II alpha, CK2a, CK2A1, CK2α, CKII, CSNK2A1 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

Target Details

	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(PubMed:11239457, PubMed:11704824, PubMed:16193064, PubMed:19188443, PubMed:20625391, PubMed:22406621). Phosphorylates CCAR2 at 'Thr-454' in gastric carcinoma tissue(PubMed:24962073).
Molecular Weight:	45 kDa
Gene ID:	1457
UniProt:	P68400
Pathways:	SARS-CoV-2 Protein Interactome

Application Details

Application Notes:	WB: 1:500-1:2000, IP: 1:500-1:2000, IHC: 1:20-1:200, IF: 1:10-1:100
Restrictions:	For Research Use only

Handling

Format:	Liquid

Handling

Buffer:	PBS with 0.02 % sodium azide and 50 % glycerol pH 7.3,
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C
Storage Comment:	-20°C for 12 months (Avoid repeated freeze / thaw cycles.)
Expiry Date:	12 months

