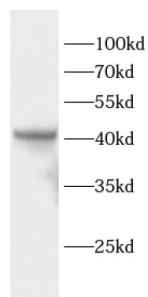


Casein Kinase II Subunit Alpha (CSNK2A1) Antibody

Catalogue No.: abx149585



WB analysis of HeLa cells, using CSNK2A1 antibody (1/1000 dilution).

Casein Kinase II Subunit Alpha (CSNK2A1) Antibody is a Rabbit Polyclonal antibody for the detection of CSNK2A1.

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. 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).

Target: Casein Kinase II Subunit Alpha (CSNK2A1)

Clonality: Polyclonal

Reactivity: Human, Mouse, Rat

Tested Applications: ELISA, WB, IHC

Host: Rabbit

Recommended dilutions: WB: 1/500 - 1/2000, IHC: 1/20 - 1/200. Optimal dilutions/concentrations should be determined by the end user.

Conjugation: Unconjugated

Datasheet

Version: 1.0.0
Revision date: 27 Apr 2025



Immunogen:	casein kinase 2, alpha 1 polypeptide
Isotype:	IgG
Form:	Liquid
Purity:	≥ 95% (SDS-PAGE)
Purification:	Purified by immunogen affinity chromatography.
Storage:	Aliquot and store at -20°C. Avoid repeated freeze/thaw cycles.
Validity:	12 months.
UniProt Primary AC:	P68400 (UniProt , ExPASy)
Gene Symbol:	CSNK2A1
GeneID:	1457
OMIM:	115440
HGNC:	2457
KEGG:	hsa:1457
Ensembl:	ENSG00000101266
String:	9606.ENSP00000217244
Molecular Weight:	Observed MW: 45 kDa
Buffer:	PBS, pH 7.3, with 0.02% sodium azide and 50% glycerol.
Concentration:	2 mg/ml
Note:	THIS PRODUCT IS FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC, THERAPEUTIC OR COSMETIC PROCEDURES. NOT FOR HUMAN OR ANIMAL CONSUMPTION.