

Anti-CSNK2A1 Polyclonal Antibody

Cat: K108269P

Summary:

[Product name]: Anti-CSNK2A1 antibody **[Source]**: Rabbit

【Isotype】: IgG 【Species reactivity】: Human Mouse Rat

[Swiss Prot]: P68400 **[Gene ID]**: 1457

【Calculated】: MW:29/45kDa

[Purification]: Affinity purification

【Tested applications】: IHC

【Recommended dilution】: IHC 1:50-200.

【IHC Positive sample】: Human prostate cancer

[Subcellular location]: Nucleus

[Immunogen]: A synthetic peptide of huma CSNK2A1

【Storage】: Shipped at 4°C. Upon delivery aliquot and store at -20°C

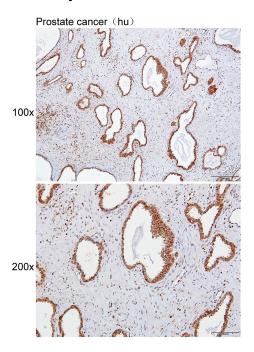
Background:

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. 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.

Verified picture



Immunohistochemistry of paraffin-embedded Human prostate cancer with CSNK2A1 antibody diluted at 1:100