Anti-CSNK2A2 Antibody

HA500514



Product Type: Rabbit polyclonal IgG, primary antibodies

Species reactivity: Human, Mouse, Rat

Applications: WB

Molecular Wt: 41 kDa

Description:

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/TP53dependent 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 cochaperones 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.

Recombinant protein within human CSNK2A2 aa 151-350.

Positive control: Hela cell lysate, mouse testis tissue lysate, rat testis tissue lysate, mouse brain tissue

lysate.

Subcellular location: Cytosol, nucleoplasm, nucleus, plasma membrane, acrosomal vesicle, chromatin, protein

kinase CK2 complex.

Database links: SwissProt: P19784 Human | O54833 Mouse

Recommended Dilutions:

Immunogen:

WB 1:1,000-1:2,000

Storage Buffer: 1*TBS (pH7.4), 0.2% BSA, 50% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Store at +4℃ after thawing. Aliquot store at -20℃. Avoid repeated freeze / thaw cycles.

Purity: Immunogen affinity purified.



Images

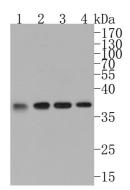


Fig1: Western blot analysis of CSNK2A2 on different lysates. Proteins were transferred to a PVDF membrane and blocked with 5% NFDW/TBST for 1 hour at room temperature. The primary antibody (HA500514, 1/1,000) was used in 5% NFDM/TBST at room temperature for 2 hours. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1:200,000 dilution was used for 1 hour at room temperature.

Positive control:

Lane 1: Hela cell lysate

Lane 2: Mouse testis tissue lysate

Lane 3: Rat testis tissue lysate

Lane 4: Mouse brain tissue lysate

Predicted band size: 41 kDa Observed band size: 37 kDa

Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

Background References

- 1. Wang YF. et. al. Identification of ST3AGL4, MFHAS1, CSNK2A2 and CD226 as loci associated with systemic lupus erythematosus (SLE) and evaluation of SLE genetics in drug repositioning. Ann Rheum Dis. 2018 Jul
- 2. Saxena R. et. al. Genome-wide association study identifies variants in casein kinase II (CSNK2A2) to be associated with leukocyte telomere length in a Punjabi Sikh diabetic cohort. Circ Cardiovasc Genet. 2014 Jun

