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# Anti-CSNK2A2 Antibody

Rabbit Anti Human Polyclonal Antibody
Catalog # ALS18556

## Product Information

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| **Application** | WB, IHC-P, E |
| **Primary Accession** | P19784 |
| **Predicted** | Human |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Isotype** | IgG |
| **Calculated MW** | 41213 |
| **Concentration (mg/ml)** | 1 mg/ml |

## Additional Information

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| **Gene ID** | 1459 |
| **Alias Symbol** | CSNK2A2 |
| **Other Names** | CSNK2A2, CASEIN KINASE II ALPHA', Casein kinase II subunit alpha, Ck2alpha', Casein kinase 2 alpha', CK2A2, CK II alpha |
| **Target/Specificity** | Human CSNK2A2 |
| **Reconstitution & Storage** | Caprylic acid and ammonium sulfate precipitation |
| **Precautions** | Anti-CSNK2A2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures. |

## Protein Information

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| **Name** | CSNK2A2 |
| **Synonyms** | CK2A2 |
| **Function** | 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 (PubMed:11239457, PubMed:11704824, PubMed:16193064, PubMed:30898438). Regulates numerous cellular processes, such as cell cycle progression, apoptosis and transcription, as well as viral infection (PubMed:11704824, PubMed:16193064, PubMed:30898438). May act as a regulatory node which integrates and coordinates numerous signals leading to an appropriate cellular response (PubMed:12631575, PubMed:19387551, PubMed:19387552). 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 (PubMed:12631575, PubMed:19387551, PubMed:19387552). Also required for p53/TP53-mediated apoptosis, phosphorylating 'Ser-392' of p53/TP53 following UV irradiation (PubMed:11239457). Phosphorylates a number of DNA repair proteins in response to DNA damage, such as MDC1, RAD9A, RAD51 and HTATSF1, promoting their recruitment to DNA damage sites (PubMed:20545769, PubMed:21482717, PubMed:22325354, PubMed:26811421, PubMed:30898438, PubMed:35597237). Can also negatively regulate apoptosis (PubMed:19387551, PubMed:19387552). Phosphorylates the caspases CASP9 and CASP2 and the apoptotic regulator NOL3 (PubMed:12631575, PubMed:19387551, PubMed:19387552). Phosphorylation protects CASP9 from cleavage and activation by CASP8, and inhibits the dimerization of CASP2 and activation of CASP8 (PubMed:12631575, PubMed:19387551, PubMed:19387552). Regulates transcription by direct phosphorylation of RNA polymerases I, II, III and IV (PubMed:12631575, PubMed:19387551, PubMed:19387552). Also phosphorylates and regulates numerous transcription factors including NF-kappa-B, STAT1, CREB1, IRF1, IRF2, ATF1, SRF, MAX, JUN, FOS, MYC and MYB (PubMed:12631575, PubMed:19387551, PubMed:19387552). Phosphorylates Hsp90 and its co- chaperones FKBP4 and CDC37, which is essential for chaperone function (PubMed:19387550). Regulates Wnt signaling by phosphorylating CTNNB1 and the transcription factor LEF1 (PubMed:19387549). Acts as an ectokinase that phosphorylates several extracellular proteins (PubMed:12631575, PubMed:19387551, PubMed:19387552). During viral infection, phosphorylates various proteins involved in the viral life cycles of EBV, HSV, HBV, HCV, HIV, CMV and HPV (PubMed:12631575, PubMed:19387551, PubMed:19387552). May phosphorylate histone H2A on 'Ser-1' (PubMed:38334665).

**Cellular Location**

Nucleus {ECO:0000250|UniProtKB:O54833}. Cytoplasm {ECO:0000250|UniProtKB:O54833}. Note=Interaction with SIRT6 prevents translocation into the nucleus. {ECO:0000250|UniProtKB:O54833}

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.