

**Anti-CSNK2A2 Antibody**  
**Rabbit Anti Human Polyclonal Antibody**  
**Catalog # ALS18556**

**Specification**

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**Anti-CSNK2A2 Antibody - Product Information**

Application	WB, IHC-P, E
Primary Accession	<a href="#">P19784</a>
Predicted	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	41213

**Anti-CSNK2A2 Antibody - Additional Information**

**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.

**Anti-CSNK2A2 Antibody - Protein Information**

**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:<a href="http://www.uniprot.org/citations/11239457" target="\_blank">11239457</a>, PubMed:<a href="http://www.uniprot.org/citations/11704824" target="\_blank">11704824</a>, PubMed:<a href="http://www.uniprot.org/citations/16193064" target="\_blank">16193064</a>, PubMed:<a href="http://www.uniprot.org/citations/30898438" target="\_blank">30898438</a>). Regulates numerous cellular processes, such as cell cycle progression, apoptosis and transcription, as well as viral infection (PubMed:<a href="http://www.uniprot.org/citations/11239457" target="\_blank">11239457</a>, PubMed:<a href="http://www.uniprot.org/citations/11704824" target="\_blank">11704824</a>, PubMed:<a href="http://www.uniprot.org/citations/16193064" target="\_blank">16193064</a>, PubMed:<a href="http://www.uniprot.org/citations/30898438" target="\_blank">30898438</a>).

href="http://www.uniprot.org/citations/11704824" target="\_blank">>11704824</a>, PubMed:<a href="http://www.uniprot.org/citations/16193064" target="\_blank">>16193064</a>, PubMed:<a href="http://www.uniprot.org/citations/30898438" target="\_blank">>30898438</a>). May act as a regulatory node which integrates and coordinates numerous signals leading to an appropriate cellular response (PubMed:<a href="http://www.uniprot.org/citations/12631575" target="\_blank">>12631575</a>, PubMed:<a href="http://www.uniprot.org/citations/19387552" target="\_blank">>19387552</a>, PubMed:<a href="http://www.uniprot.org/citations/19387551" target="\_blank">>19387551</a>). 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:<a href="http://www.uniprot.org/citations/12631575" target="\_blank">>12631575</a>, PubMed:<a href="http://www.uniprot.org/citations/19387552" target="\_blank">>19387552</a>, PubMed:<a href="http://www.uniprot.org/citations/19387551" target="\_blank">>19387551</a>). Also required for p53/TP53-mediated apoptosis, phosphorylating 'Ser-392' of p53/TP53 following UV irradiation (PubMed:<a href="http://www.uniprot.org/citations/11239457" target="\_blank">>11239457</a>). 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:<a href="http://www.uniprot.org/citations/20545769" target="\_blank">>20545769</a>, PubMed:<a href="http://www.uniprot.org/citations/21482717" target="\_blank">>21482717</a>, PubMed:<a href="http://www.uniprot.org/citations/22325354" target="\_blank">>22325354</a>, PubMed:<a href="http://www.uniprot.org/citations/26811421" target="\_blank">>26811421</a>, PubMed:<a href="http://www.uniprot.org/citations/30898438" target="\_blank">>30898438</a>, PubMed:<a href="http://www.uniprot.org/citations/35597237" target="\_blank">>35597237</a>). Can also negatively regulate apoptosis (PubMed:<a href="http://www.uniprot.org/citations/19387552" target="\_blank">>19387552</a>, PubMed:<a href="http://www.uniprot.org/citations/19387551" target="\_blank">>19387551</a>). Phosphorylates the caspases CASP9 and CASP2 and the apoptotic regulator NOL3 (PubMed:<a href="http://www.uniprot.org/citations/12631575" target="\_blank">>12631575</a>, PubMed:<a href="http://www.uniprot.org/citations/19387552" target="\_blank">>19387552</a>, PubMed:<a href="http://www.uniprot.org/citations/19387551" target="\_blank">>19387551</a>). Phosphorylation protects CASP9 from cleavage and activation by CASP8, and inhibits the dimerization of CASP2 and activation of CASP8 (PubMed:<a href="http://www.uniprot.org/citations/12631575" target="\_blank">>12631575</a>, PubMed:<a href="http://www.uniprot.org/citations/19387552" target="\_blank">>19387552</a>, PubMed:<a href="http://www.uniprot.org/citations/19387551" target="\_blank">>19387551</a>). Regulates transcription by direct phosphorylation of RNA polymerases I, II, III and IV (PubMed:<a href="http://www.uniprot.org/citations/12631575" target="\_blank">>12631575</a>, PubMed:<a href="http://www.uniprot.org/citations/19387552" target="\_blank">>19387552</a>, PubMed:<a href="http://www.uniprot.org/citations/19387551" target="\_blank">>19387551</a>). Also phosphorylates and regulates numerous transcription factors including NF-kappa-B, STAT1, CREB1, IRF1, IRF2, ATF1, SRF, MAX, JUN, FOS, MYC and MYB (PubMed:<a href="http://www.uniprot.org/citations/12631575" target="\_blank">>12631575</a>, PubMed:<a href="http://www.uniprot.org/citations/19387552" target="\_blank">>19387552</a>, PubMed:<a href="http://www.uniprot.org/citations/19387551" target="\_blank">>19387551</a>). Phosphorylates Hsp90 and its co-chaperones FKBP4 and CDC37, which is essential for chaperone function (PubMed:<a href="http://www.uniprot.org/citations/19387550" target="\_blank">>19387550</a>). Regulates Wnt signaling by phosphorylating CTNNB1 and the transcription factor LEF1 (PubMed:<a href="http://www.uniprot.org/citations/19387549" target="\_blank">>19387549</a>). Acts as an ectokinase that phosphorylates several extracellular proteins (PubMed:<a href="http://www.uniprot.org/citations/12631575" target="\_blank">>12631575</a>, PubMed:<a href="http://www.uniprot.org/citations/19387552" target="\_blank">>19387552</a>, PubMed:<a href="http://www.uniprot.org/citations/19387551" target="\_blank">>19387551</a>). During viral infection, phosphorylates various proteins involved in the viral life cycles of EBV, HSV, HBV, HCV, HIV, CMV and HPV (PubMed:<a href="http://www.uniprot.org/citations/12631575" target="\_blank">>12631575</a>, PubMed:<a href="http://www.uniprot.org/citations/19387552" target="\_blank">>19387552</a>, PubMed:<a href="http://www.uniprot.org/citations/19387551" target="\_blank">>19387551</a>).

**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}

**Anti-CSNK2A2 Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**Anti-CSNK2A2 Antibody - Images**