

CKII alpha Antibody
Rabbit mAb
Catalog # AP90241

Specification

CKII alpha Antibody - Product Information

Application	WB, IHC, FC
Primary Accession	P68400
Reactivity	Rat
Clonality	Monoclonal

Other Names

Casein kinase 2 alpha 1 polypeptide;Casein kinase II alpha subunit;CK II alpha;CK2 alpha;CK2A1;CKIIalpha;CSNK2A1

Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	45144 Da

CKII alpha Antibody - Additional Information

Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human CKII alpha

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.
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Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.
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CKII alpha Antibody - Protein Information

Name CSNK2A1

Synonyms CK2A1

Function

Catalytic subunit of a constitutively active serine/threonine-protein kinase complex that

href="http://www.uniprot.org/citations/19387552" target="_blank">19387552, PubMed:23123191). Also phosphorylates and regulates numerous transcription factors including NF-kappa-B, STAT1, CREB1, IRF1, IRF2, ATF1, ATF4, SRF, MAX, JUN, FOS, MYC and MYB (PubMed:12631575, PubMed:19387550, PubMed:19387551, PubMed:19387552, PubMed:23123191). Phosphorylates Hsp90 and its co-chaperones FKBP4 and CDC37, which is essential for chaperone function (PubMed:19387550). Mediates sequential phosphorylation of FNIP1, promoting its gradual interaction with Hsp90, leading to activate both kinase and non-kinase client proteins of Hsp90 (PubMed:30699359). 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:19387550, 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:19387550, PubMed:19387551, PubMed:19387552). Phosphorylates PML at 'Ser-565' and primes it for ubiquitin-mediated degradation (PubMed:20625391, PubMed:22406621). Plays an important role in the circadian clock function by phosphorylating BMAL1 at 'Ser-90' which is pivotal for its interaction with CLOCK and which controls CLOCK nuclear entry (By similarity). Phosphorylates CCAR2 at 'Thr-454' in gastric carcinoma tissue (PubMed:24962073). Phosphorylates FMR1, promoting FMR1-dependent formation of a membraneless compartment (PubMed:30765518, PubMed:31439799). May phosphorylate histone H2A on 'Ser-1' (PubMed:38334665).

Cellular Location

Nucleus

Tissue Location

Expressed in gastric carcinoma tissue and the expression gradually increases with the progression of the carcinoma (at protein level).

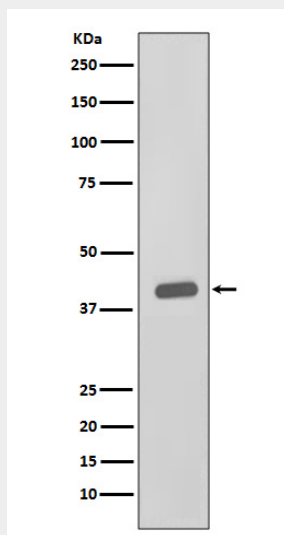
CKII alpha Antibody - Protocols

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](#)

CKII alpha Antibody - Images



Western blot analysis of CKII alpha expression in HeLa cell lysate.