

Rabbit CKII alpha Monoclonal Antibody | anti-CKII alpha antibody

Anti-CKII alpha Rabbit Monoclonal Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA47111	Rabbit	Human, Mouse, Rat	Western Blot, Immunohistochemistry, Flow Cytometry, Functional Assay

PRODUCT SYNONYMS

CKII alpha; Monoclonal Antibody; Anti-CKII alpha Rabbit Monoclonal Antibody; Casein kinase II subunit alpha; CK II alpha; 2.7.11.1; CSNK2A1; CK2A1; anti-CKII alpha antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Monoclonal
Purity/Purification	Affinity-chromatography
Form/Format	Liquid
Sequence Length	255
Applicable Applications for anti-CKII alpha antibody	WB (Western Blot), IHC (Immunohistochemistry), FCM/FACS (Flow Cytometry)
Immunogen	A synthesized peptide derived from human CKII alpha
Subcellular Localization	Nucleus.
Tissue Specificity	Expressed in gastric carcinoma tissue and the expression gradually increases with the progression of the carcinoma (at protein level).
Contents	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Preparation and Storage	Store at -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.

IMAGES



WB (Western Blot)

Western blot analysis of CKII alpha expression in HeLa cell lysate (AAA47111). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-CSNK2A1 monoclonal antibody overnight at 4 degree C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for CSNK2A1.



IHC (Immunohistochemistry)

Immunohistochemical analysis of paraffin-embedded human colon, using CKII alpha Antibody(AAA47111). CSNK2A1 was detected in paraffin-embedded tissue section. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-CSNK2A1 Antibody (AAA47111) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.

ADDITIONAL INFORMATION

Related Product Information for anti-CKII alpha antibody	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 (PubMed: 11239457, PubMed: 11704824, PubMed: 16193064, PubMed: 19188443, PubMed: 20625391, PubMed: 22406621). Phosphorylates CCAR2 at 'Thr-454' in gastric carcinoma tissue (PubMed: 24962073).
Product Categories/Family for anti-CKII alpha antibody	Cell Biology; Cell Cycle; Kinases/Phosphatases; Cell Biology; Apoptosis; Intracellular; Kinases; Signal Transduction; Protein Phosphorylation; SER/THR Kinases; Other Kinases

NCBI AND UNIPROT INFORMATION

NCBI GI #	4503095
NCBI GeneID	1457
NCBI Accession #	NP_001886.1
NCBI GenBank Nucleotide #	NM_001895.3
UniProt Accession #	P68400; P19138; P20426; Q14013; Q5U065; B4DYS6; D3DVV8; Q8NEV1
Molecular Weight	45144 MW
NCBI Official Full Name	casein kinase II subunit alpha isoform a
NCBI Official Synonym Full Names	casein kinase 2 alpha 1
NCBI Official Symbol	CSNK2A1
NCBI Official Synonym Symbols	CKII; Cka1; Cka2; CK2A1; OCNDS; CSNK2A3
NCBI Protein Information	casein kinase II subunit alpha
UniProt Protein Name	Casein kinase II subunit alpha
UniProt Gene Name	CSNK2A1
UniProt Synonym Gene Names	CK2A1; CK II alpha

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/monoclonal/ckii-alpha-antibody-western-blot-immunohistochemistry-flow-cytometry-elisa/47111>