

Goat CAMK2A / CaMKII Alpha Polyclonal Antibody | anti-CAMK2A antibody

Goat Polyclonal to Human CAMK2A / CaMKII Alpha

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA52166	Goat	Bat, Bovine, Dog, Horse, Human, Monkey, Mouse, Pig, Rabbit, Rat	ELISA, Western Blot, Immunohistochemistry

PRODUCT SYNONYMS

CAMK2A / CaMKII Alpha; Polyclonal Antibody; Goat Polyclonal to Human CAMK2A / CaMKII Alpha; Anti-CAMK2A / CaMKII Alpha Antibody (Internal) IHC-plus; CAMK2A; AlphaCaMKII; CaM-kinase II alpha chain; CaMK-II subunit alpha; CAMKA; CaM kinase II alpha; CaMK II alpha; CaMK-II alpha subunit; CaMKIINalpha; CaM kinase II alpha subunit; CaM kinase II subunit alpha; CaMKII alpha; CaMKIIalpha; KIAA0968; Human CAMK2A; CaMKII Alpha; anti-CAMK2A antibody

PRODUCT SPECIFICATIONS

Host	Goat
Reactivity	Bat, Bovine, Dog, Horse, Human, Monkey, Mouse, Pig, Rabbit, Rat
Clonality	Polyclonal
Specificity	Human CAMK2A. This antibody is expected to recognize both reported isoforms (NP_057065.2; NP_741960.1).
Purity/Purification	Purified from goat serum by ammonium sulphate precipitation followed by antigen affinity chromatography using immunizing peptide.
Form/Format	TBS, pH 7.3, 0.5% BSA, 0.02% Sodium Azide
Concentration	0.5 mg/ml (varies by lot)
Sequence Length	489
Applicable Applications for anti-CAMK2A antibody	ELISA, WB (Western Blot), IHC (Immunohistochemistry)
Target	CAMK2A/CaMKII Alpha
Epitope	aa455-468
Immunogen Species	Raised against human
Immunogen	CAMK2A / CaMKII Alpha antibody was raised against peptide with sequence C-PRTAQSEETRVWHR, from the internal region of the protein sequence according to NP_057065.2; NP_741960.1
Disclaimer	Due to the highly specific nature of antibodies and antigens, we cannot predict or be held responsible with respect to how this antibody will behave in your systems. Researchers using this antibody should conduct optimization studies to achieve the most optimal result possible for their intended application.

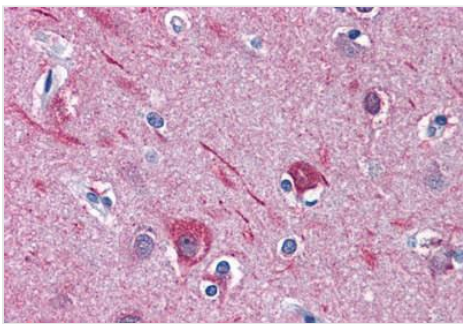
Recommended Immunohistochemistry Protocol	The following protocol is a recommendation only, and AAA Biotech makes no guarantee of the results: Tissue Preparation: Formalin fixation and embedding in paraffin wax. Tissue Sectioning: Make 4-um sections and place on pre-cleaned and charged microscope slides. Heat in a tissue-dryingoven for 45 minutes at 60°C. Deparaffinization: Wash dry slides in 3 changes of xylene - 5 minutes each @ RT Rehydration: Wash slides in 3 changes of 100% alcohol - 3 minutes each @ RT Wash slides in 2 changes of 95% alcohol - 3 minutes each @ RT Wash slides in 1 change of 80% alcohol - 3 minutes @ RT Rinse slides in gentle running distilled water - 5 minutes @ RT Antigen retrieval: Steam slides in 0.01 M sodium citrate buffer, pH 6.0 at 99-100°C - 20 minutes Remove from heat and let stand at room temperature in buffer - 20 minutes Rinse in 1X TBS with Tween (TBST) -1 minute @ RT Immunostaining: (Do not allow tissues to dry at any time during the staining procedure) Apply a universal protein block - 20 minutes @ RT Drain protein block from slides, apply diluted primary antibody - 45 minutes @ RT Rinse slides in 1 X TBST - 1 minute @ RT Apply a biotinylated secondary antibody appropriate for the primary antibody - 30 minutes @ RT Rinse slides in 1X TBST -1 minute @ RT Apply alkaline phosphatase streptavidin - 30 minutes @ RT Rinse slides in 1X TBST -1 minute @ RT Apply alkaline phosphatase chromogen substrate - 30 minutes @ RT Wash slides in distilled water - 1 minute @ RT Dehydrate: (This method should only be used if the chromogen substrate is alcohol insoluble (e.g. Vector Red, DAB) Wash slides in 2 changes of 80% alcohol - 1 minute each @ RT Wash slides in 2 changes of 95% alcohol - 1 minute each @ RT Wash slides in 3 changes of 100% alcohol - 1 minute each @ RT Wash slides in 3 changes of xylene - 1 minute each @ RT Apply coverslip
Preparation and Storage	Aliquot and store -20°C. Avoid freeze/thaw cycles.

IMAGES



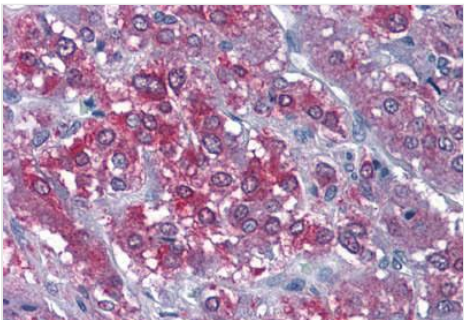
WB (Western Blot)

Antibody (0.1 ug/ml) staining of Mouse Brain lysate (35 ug protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.



IHC (Immunohistochemistry)

Anti-CAMK2A antibody IHC of human brain, cortex. Immunohistochemistry of formalin-fixed, paraffin-embedded tissue after heat-induced antigen retrieval. Antibody concentration 3.75 ug/ml.



IHC (Immunohistochemistry)

Anti-CAMK2A antibody IHC of human adrenal. Immunohistochemistry of formalin-fixed, paraffin-embedded tissue after heat-induced antigen retrieval. Antibody concentration 3.75 ug/ml.

ADDITIONAL INFORMATION

Related Product Information for anti-CAMK2A antibody	CAMK2Alpha, together with the beta, delta, and gamma subunits, constitute the CAMK2 heteromultimeric holoenzyme serine/threonine kinase. CAMK2A has been implicated in learning, where it potentiates synaptic transmission by phosphorylating AMPA receptors. Variants are produced by alternative splicing.
Product Categories/Family for anti-CAMK2A antibody	Family: Protein Kinase; Subfamily: CAMK2

NCBI AND UNIPROT INFORMATION

NCBI GI #	25952114
NCBI GeneID	815
NCBI Accession #	NP_057065.2
NCBI GenBank Nucleotide #	NM_015981.3
UniProt Accession #	Q9UQM7; Q9UL21; Q9Y2H4; Q9Y352
NCBI Official Full Name	calcium/calmodulin-dependent protein kinase type II subunit alpha isoform 1
NCBI Official Synonym Full Names	calcium/calmodulin-dependent protein kinase II alpha
NCBI Official Symbol	CAMK2A
NCBI Official Synonym Symbols	CAMKA

NCBI Protein Information	calcium/calmodulin-dependent protein kinase type II subunit alpha; CaMKIIAlpha; CaMK-II alpha subunit; caMK-II subunit alpha; CaM-kinase II alpha chain; CaM kinase II alpha subunit; caM kinase II subunit alpha; calcium/calmodulin-dependent protein kinase II alpha-B subunit; calcium/calmodulin-dependent protein kinase type II alpha chain; calcium/calmodulin-dependent protein kinase (CaM kinase) II alpha
UniProt Protein Name	Calcium/calmodulin-dependent protein kinase type II subunit alpha
UniProt Gene Name	CAMK2A
UniProt Synonym Gene Names	CAMKA; KIAA0968; CaM kinase II subunit alpha; CaMK-II subunit alpha
UniProt Entry Name	KCC2A_HUMAN

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/polyclonal/camk2a-camkii-alpha-antibody-western-blot-immunohistochemistry-elisa/52166>