

## ARG64934 anti-CaMKII alpha antibody

Package: 100 µg, 50 µg  
Store at: -20°C

### Summary

Product Description	Goat Polyclonal antibody recognizes CaMKII alpha
Tested Reactivity	Hu, Ms, Rat
Tested Application	FACS, ICC/IF, WB
Specificity	This antibody is expected to recognize both reported isoforms (NP_057065.2; NP_741960.1).
Host	Goat
Clonality	Polyclonal
Isotype	IgG
Target Name	CaMKII alpha
Species	Human
Immunogen	C-PRTAQSEETRVWHR
Conjugation	Un-conjugated
Alternate Names	CAMKA; CaMK-II subunit alpha; Calcium/calmodulin-dependent protein kinase type II subunit alpha; CaM kinase II subunit alpha; EC 2.7.11.17

### Application Instructions

Application table	Application	Dilution
	FACS	10 µg/ml
	ICC/IF	10 µg/ml
	WB	0.03 - 0.3 µg/ml

**Application Note**  
WB: Recommend incubate at RT for 1h.  
IHC-P: Antigen Retrieval: Steam tissue section in Citrate buffer (pH 6.0).  
\* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

### Properties

Form	Liquid
Purification	Purified from goat serum by antigen affinity chromatography.
Buffer	Tris saline (pH 7.3), 0.02% Sodium azide and 0.5% BSA.
Preservative	0.02% Sodium azide
Stabilizer	0.5% BSA
Concentration	0.5 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated

freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note

For laboratory research only, not for drug, diagnostic or other use.

## Bioinformation

Background

The product of this gene belongs to the serine/threonine protein kinases family, and to the Ca(2+)/calmodulin-dependent protein kinases subfamily. Calcium signaling is crucial for several aspects of plasticity at glutamatergic synapses. This calcium calmodulin-dependent protein kinase is composed of four different chains: alpha, beta, gamma, and delta. The alpha chain encoded by this gene is required for hippocampal long-term potentiation (LTP) and spatial learning. In addition to its calcium-calmodulin (CaM)-dependent activity, this protein can undergo autophosphorylation, resulting in CaM-independent activity. Two transcript variants encoding distinct isoforms have been identified for this gene. [provided by RefSeq, Nov 2008]

Highlight

Related Antibody Duos and Panels:

[ARG30157 Phospho CaMKII Antibody Duo](#)

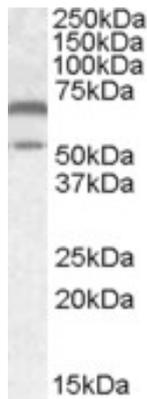
Related products:

[CaMKII alpha antibodies;](#) [CaMKII alpha Duos / Panels;](#) [Anti-Goat IgG secondary antibodies;](#)

Research Area  
Calculated Mw

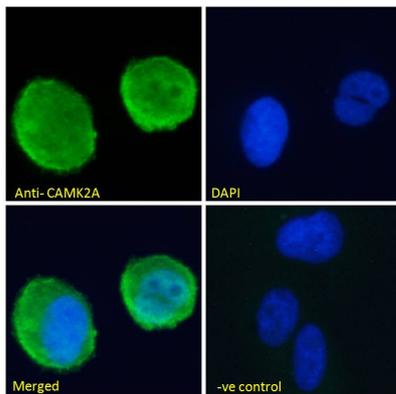
Cell Biology and Cellular Response antibody; Neuroscience antibody; Signaling Transduction antibody  
54 kDa

## Images



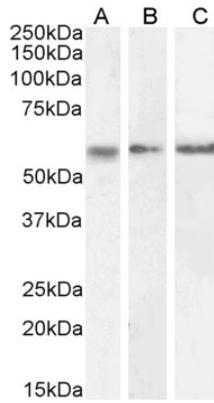
ARG64934 anti-CaMKII alpha antibody WB image

Western blot: Mouse Brain lysate (35 µg protein in RIPA buffer) stained with ARG64934 anti-CaMKII alpha antibody at 0.1 µg/ml dilution.



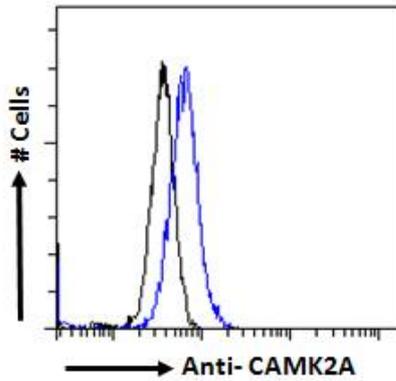
ARG64934 anti-CaMKII alpha antibody ICC/IF image

Immunofluorescence: Paraformaldehyde fixed U2OS cells permeabilized with 0.15% Triton. Cells were stained with ARG64934 anti-CaMKII alpha antibody (green) at 10 µg/ml dilution for 1 hour. DAPI (blue) for nuclear staining. Negative control: Unimmunized goat IgG (green) at 10 µg/ml dilution.



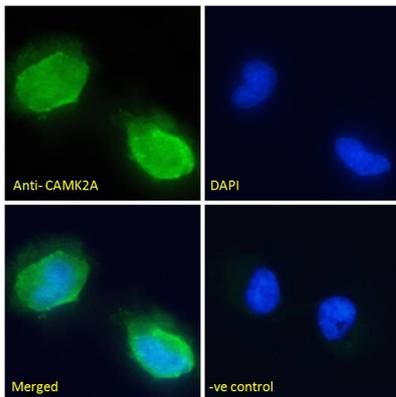
#### ARG64934 anti-CaMKII alpha antibody WB image

Western blot: 35  $\mu$ g of Human cerebellum (A), Mouse brain (B) and Rat brain (C) lysates (in RIPA buffer) stained with ARG64934 anti-CaMKII alpha antibody at 0.3  $\mu$ g/ml dilution and incubated at RT for 1 hour.



#### ARG64934 anti-CaMKII alpha antibody FACS image

Flow Cytometry: Paraformaldehyde-fixed Kelly cells permeabilized with 0.5% Triton. Cells were stained with ARG64934 anti-CaMKII alpha antibody (blue line) at 10  $\mu$ g/ml dilution for 1 hour, followed by incubation with Alexa FluorR 488 labelled secondary antibody. IgG control: Unimmunized goat IgG (black line).



#### ARG64934 anti-CaMKII alpha antibody ICC/IF image

Immunofluorescence: Paraformaldehyde fixed U251 cells permeabilized with 0.15% Triton. Cells were stained with ARG64934 anti-CaMKII alpha antibody (green) at 10  $\mu$ g/ml dilution for 1 hour. DAPI (blue) for nuclear staining. Negative control: Unimmunized goat IgG (green) at 10  $\mu$ g/ml dilution.