

## ARG22260 anti-CaMKII alpha antibody [6G9]

Package: 50 µg  
Store at: -20°C

### Summary

Product Description	Mouse Monoclonal antibody [6G9] recognizes CaMKII alpha
Tested Reactivity	Hu, Ms, Rat, Bov
Tested Application	ELISA, ICC/IF, IHC-P, IP, RIA, WB
Specificity	Detects ~50-60kDa. Recognizes both phosphorylated and non-phosphorylated forms.
Host	Mouse
Clonality	Monoclonal
Clone	6G9
Isotype	IgG1
Target Name	CaMKII alpha
Species	Rat
Immunogen	Partially purified Rat CaMKII
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
	ELISA	Assay-dependent
	ICC/IF	1:50
	IHC-P	Assay-dependent
	IP	Assay-dependent
	RIA	Assay-dependent
	WB	1:10000
	Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

### Properties

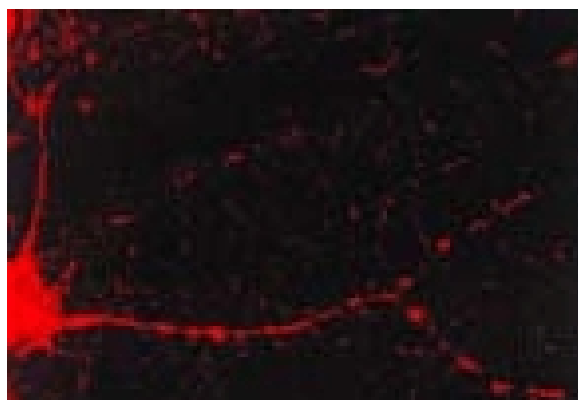
Form	Liquid
Purification	Purification with Protein G.
Buffer	PBS (pH 7.4), 0.09% Sodium azide and 50% Glycerol
Preservative	0.09% Sodium azide

Stabilizer	50% Glycerol
Concentration	1 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. 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

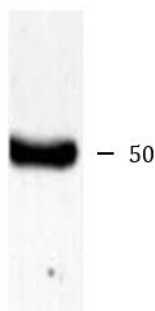
Gene Symbol	Camk2a
Gene Full Name	calcium/calmodulin-dependent protein kinase II alpha
Background	The product of this gene belongs to the serine/threonine protein kinases family, and to the Ca(2+)/calmodulin-dependent protein kinases subfamily. Calcium signaling is crucial for several aspects of plasticity 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]
Function	CaM-kinase II (CAMK2) is a prominent kinase in the central nervous system that may function in long-term potentiation and neurotransmitter release. Member of the NMDAR signaling complex in excitatory synapses it may regulate NMDAR-dependent potentiation of the AMPAR and synaptic plasticity (By similarity). [UniProt]
Calculated Mw	54 kDa
Cellular Localization	Cytoplasm, Cell Junction, Mitochondrion, Nucleus, Presynaptic Cell Membrane, Synapse

## Images



ARG22260 anti-CaMKII alpha antibody [6G9] ICC/IF image

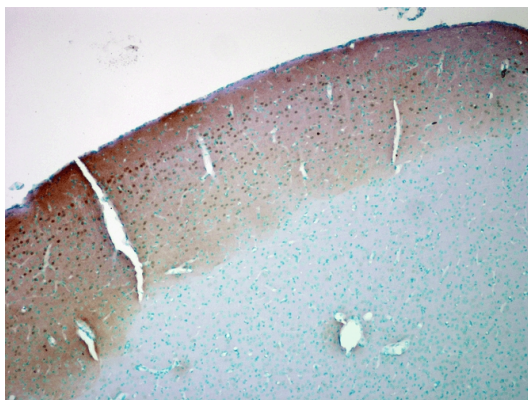
Immunocytochemistry: Mouse dissociated hippocampal neurons stained with ARG22260 anti-CaMKII alpha antibody [6G9] at 1:1000 dilution.



Rat brain

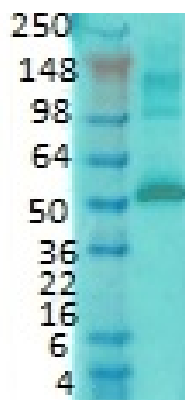
ARG22260 anti-CaMKII alpha antibody [6G9] WB image

Western blot: Rat brain lysate stained with ARG22260 anti-CaMKII alpha antibody [6G9].



ARG22260 anti-CaMKII alpha antibody [6G9] IHC image

Immunohistochemistry: Formalin fixed colon carcinoma stained with ARG22260 anti-CaMKII alpha antibody [6G9] at 1:10000 dilution (12 hours). Counterstain: Mayer Hematoxylin (purple/blue) nuclear stain at 200uL for 2 min at RT. Magnification: 40x.



ARG22260 anti-CaMKII alpha antibody [6G9] WB image

Western blot: Rat brain membrane lysate stained with ARG22260 anti-CaMKII alpha antibody [6G9] at 1:1000 dilution.