

Product Name: CaMKII alpha (11L11) Rabbit Monoclonal Antibody
Catalog #: AMRe07883

Summary

Production Name	CaMKII alpha (11L11) Rabbit Monoclonal Antibody
Description	Rabbit Monoclonal Antibody
Host	Rabbit
Application	WB,ELISA
Reactivity	Human,Mouse,Rat

Performance

Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Monoclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% New type preservative N and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.
Purification	Affinity purification

Immunogen

Gene Name	CAMK2A
Alternative Names	Alpha CaMKII; Camk2a; CAMKA; CaMKII; CaMKIINalpha; PK2CDD; PKCCD;
Gene ID	815.0
SwissProt ID	Q9UQM7.

Application

Dilution Ratio	WB 1:1000~1:5000
Molecular Weight	54kDa

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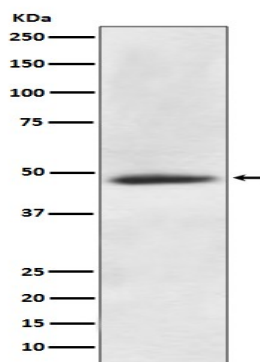


Background

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. Calcium/calmodulin-dependent protein kinase that functions autonomously after Ca(2+)/calmodulin-binding and autophosphorylation, and is involved in synaptic plasticity, neurotransmitter release and long-term potentiation. Member of the NMDAR signaling complex in excitatory synapses, it regulates NMDAR-dependent potentiation of the AMPAR and therefore excitatory synaptic transmission (By similarity). Regulates dendritic spine development (PubMed: [28130356](http://www.uniprot.org/citations/28130356)). Also regulates the migration of developing neurons (PubMed: [29100089](http://www.uniprot.org/citations/29100089)). Phosphorylates the transcription factor FOXO3 to activate its transcriptional activity (PubMed: [23805378](http://www.uniprot.org/citations/23805378)). Acts as a negative regulator of 2- arachidonoylglycerol (2-AG)-mediated synaptic signaling via modulation of DAGLA activity (By similarity).

Research Area

Image Data



Western blot analysis of CaMKII alpha expression in SH-SY5Y cell lysate.

Note

For research use only.