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

For research use only.

Summary

Description	Recombinant rabbit monoclonal antibody
Host	Rabbit
Application	WB,FC,IP
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Monoclonal
Form	Liquid
Concentration	0.5mg/ml. The concentration of this product may be batch-dependent.
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
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

Application

Dilution Ratio	WB 1:2000-1:10000,FC 1:100-1:200,IP 1:20-1:50
Molecular Weight	54kDa

Antigen Information

Gene Name	CAMK2A
Alternative Names	Alpha CaMKII; Camk2a; CAMKA; CaMKII; CaMKIINalpha; PK2CDD; PKCCD;
Gene ID	815.0
SwissProt ID	Q9UQM7
Immunogen	A synthetic peptide of human CaMKII alpha

Background

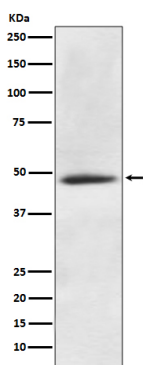
CaM-kinase II (CAMK2) is a prominent kinase in the central nervous system that may function in long-term potentiation and

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). Also regulates the migration of developing neurons (PubMed:29100089). Phosphorylates the transcription factor FOXO3 to activate its transcriptional activity (PubMed:23805378). Acts as a negative regulator of 2- arachidonoylglycerol (2-AG)-mediated synaptic signaling via modulation of DAGLA activity (By similarity).

Research Area

Neuroscience

Image Data



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