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**Product Name: CaMKII alpha/delta Rabbit Polyclonal Antibody****Catalog #: APRab00394**

For research use only.

**Summary**

<b>Description</b>	Rabbit polyclonal Antibody
<b>Host</b>	Rabbit
<b>Application</b>	WB,IHC,ICC/IF,ELISA
<b>Reactivity</b>	Human,Mouse,Rat
<b>Conjugation</b>	Unconjugated
<b>Modification</b>	Unmodified
<b>Isotype</b>	IgG
<b>Clonality</b>	Polyclonal
<b>Form</b>	Liquid
<b>Concentration</b>	1mg/ml
<b>Storage</b>	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
<b>Shipping</b>	Ice bags
<b>Buffer</b>	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% sodium azide, pH 7.3.
<b>Purification</b>	Affinity Chromatography

**Application**

<b>Dilution Ratio</b>	WB 1:500-1:1000,IHC 1:50-1:100,ICC/IF 1:50-1:200,ELISA 1:5000-1:20000
<b>Molecular Weight</b>	Calculated MW: 54 kDa; Observed MW: 54 kDa

**Antigen Information**

<b>Gene Name</b>	CAMK2A/CAMK2D CAMK2A; CAMKA; KIAA0968; Calcium/calmodulin-dependent protein kinase type II subunit alpha; CaM kinase II subunit alpha; CaMK-II subunit alpha; CAMK2D; CAMKD; Calcium/calmodulin-dependent protein kinase type II subunit delta; CaM kinase II
<b>Alternative Names</b>	
<b>Gene ID</b>	815/817
<b>SwissProt ID</b>	Q9UQM7/Q13557
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human CaMK2 alpha/delta. AA range:256-305

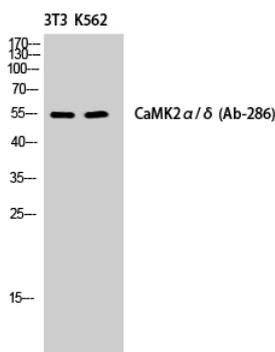
## Background

The product of CAMK2A (calcium/calmodulin dependent protein kinase II alpha) 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 CAMK2A.

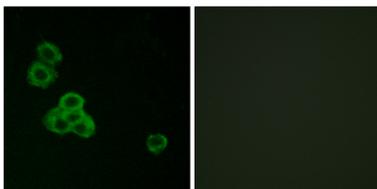
## Research Area

Neuroscience

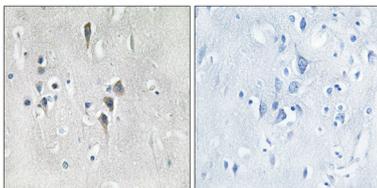
## Image Data



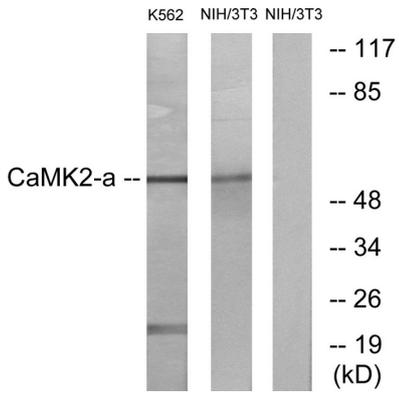
Western blot analysis of CaMKII alpha/delta in NIH3T3/K562 lysates using CaMKII alpha/delta antibody.



Immunofluorescence analysis of CaMKII alpha/delta in MCF-7 using CaMK2 alpha/delta antibody. The picture on the right is blocked using the synthesized peptide.



Immunohistochemistry analysis of paraffin-embedded Human brain tissue using CaMK2 alpha/delta antibody. High-pressure and temperature Sodium Citrate pH 6.0 was used for antigen retrieval. Sample with blocking peptide on the right.



Western blot analysis of CaMKII alpha/delta in NIH/3T3 and K562 lysates using CaMKII alpha/delta antibody. The lane on the right is blocked with the synthesized peptide.