

# Summary

CaMKII alpha/delta Rabbit Polyclonal Antibody
Primary antibody
Rabbit
WB,IHC-F,IHC-P,ICC/IF,ELISA
Human,Mouse,Rat

### Performance

Conjugation	Unconjugated	
Modification	Unmodified	
lsotype	lgG	
Clonality	Polyclonal Antibody	
Form	Liquid	
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw	
Storage	cycles.	
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide, pH 7.3.	
Purification	Affinity Chromatography	

## Immunogen

Gene Name	CAMK2A/CAMK2D
	CAMK2A; CAMKA; KIAA0968; Calcium/calmodulin-dependent protein kinase type II
Alternative Names	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
Gene ID	815/817
SwissProt ID	Q9UQM7/Q13557

# Application

Dilution Ratio	WB: 1/500-1/1000 IHC: 1/50-1/100 IF: 1/50-1/200 ELISA: 1/10000
Molecular Weight	Calculated MW: 54 kDa; Observed MW: 54 kDa



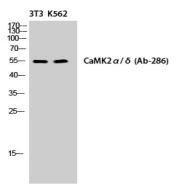
### Background

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.

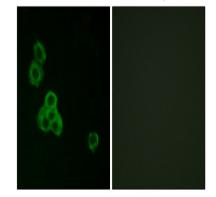
#### **Research Area**

Neuroscience

## Image Data

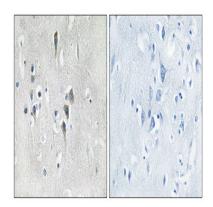


Western blot analysis of CaMKII alpha/delta in NIH3T3/K562 lysates using CaMKII alpha/delta antibody.

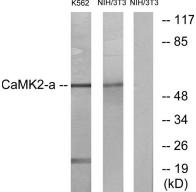


Immunofluorescence analysis of CaMKII alpha/delta in MCF-7 using CaMK2 alpha/delta antibody. The picture on the right is blocked using the synthesized peptide.





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.

#### Note

For research use only.