

CaMKII α (ANT0000R) Rabbit mAb

CatalogNo: ANT8328 **Recombinant** 

Formulation: PBS,50%glycerol,0.05%Proclin 300,0.05%BSA
Quantity : 100 ug/vial

Host Species

- Rabbit
- Human,Mouse,Rat,

Reactivity

- WB,IHC,IF,IP,ELISA

Applications

MW

- 54kD (Calculated)
 - IgG,Kappa
- 54kD (Observed)

Isotype

Recommended Dilution Ratios

IHC 1:200-1:1000

WB 1:2000-1:10000

IF 1:200-1:1000

ELISA 1:5000-1:20000

IP 1:50-1:200

Storage

Storage* -15°C to -25°C/1 year(Do not lower than -25°C)

Basic Information

Clonality Monoclonal

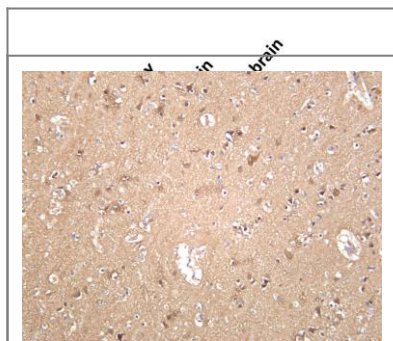
Clone Number ANT0000R

Target Information

Endogenous

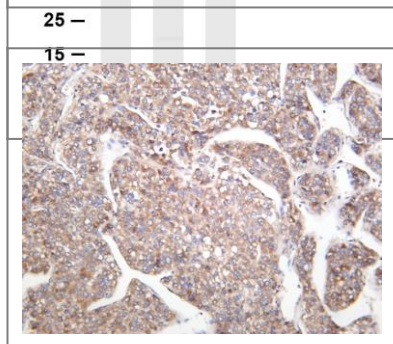
Gene name	CAMK2A CAMKA KIAA0968		
Protein Name	Calcium/calmodulin-dependent protein kinase type II subunit alpha (CaM kinase II subunit alpha) (CaMK-II subunit alpha) (EC 2.7.11.17)		
	Organism	Gene ID	UniProt ID
	Human	815 ;	Q9UQM7 ;
	Mouse	12322 ;	P11798 ;
	Rat	12322 ;	P11275 ;
Cellular Localization	Synapse		
Function	Function: Calcium/calmodulin-dependent protein kinase that functions autonomously after Ca(2+)/calmodulin-binding and autophosphorylation, and is involved in various processes, such as 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 . Also regulates the migration of developing neurons . Phosphorylates the transcription factor FOXO3 to activate its transcriptional activity . Phosphorylates the transcription factor ETS1 in response to calcium signaling, thereby decreasing ETS1 affinity for DNA (By similarity). In response to interferon-gamma (IFNgamma) stimulation, catalyzes phosphorylation of STAT1, stimulating the JAK-STAT signaling pathway . In response to interferon-beta (IFN-beta) stimulation, stimulates the JAK-STAT signaling pathway . Acts as a negative regulator of 2-arachidonoylglycerol (2-AG)mediated synaptic signaling via modulation of DAGLA activity (By similarity).		

Validation Data

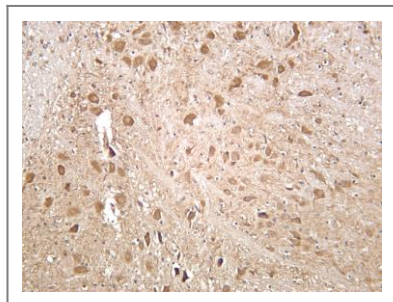


Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-CaMKII α (ANT0000R) antibody. The HRPconjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: SH-SY5Y Lane 2: Rat brain Lane 3: Mouse brain Predicted band size: 54kDa Observed band size: 54kDa

Human brain was stained with anti-CaMKII α (ANT0000R) rabbit antibody



Human hepatocellular carcinoma was stained with anti-CaMKII α (ANT0000R) rabbit antibody



Mouse brain was stained with anti-CaMKII α (ANT0000R) rabbit antibody

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