



Mouse Monoclonal Antibody **CaMKII α** conjugated to Sepharose Beads

CatalogNo: **ANT8328-S**

Size 200ul

Storage Store at 4 °C for frequent use

Description

This Antagene antibody is immobilized via covalent binding of primary amino groups to N-hydroxysuccinimide (NHS)-activated sepharose beads. It is useful for immunoprecipitation assays.

CaMKII α (ANT0000R) Rabbit mAb

Formulation: 50% slurry in PBS pH 7.2 with 0.01mg NaN₃ preservative.

Host Species

- Rabbit
- Human, Mouse, Rat,

Reactivity

- WB, IHC, IF, IP, ELISA

Applications

MW

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

Isotype

Recommended Dilution Ratios

IP

Basic Information

Clonality

Monoclonal

Clone Number ANT0000R

Immunogen Information

Specificity 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)

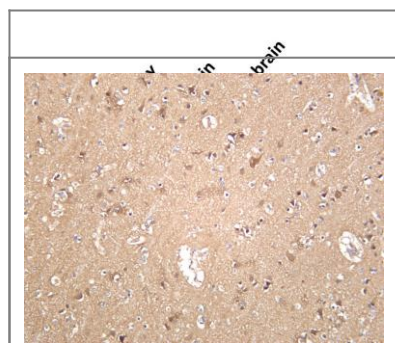
Organism	Gene ID	UniProt ID
Human	815 ;	Q9UQM7 ;
Mouse	12322 ;	P11798 ;
Rat	12322 ;	P11275 ;

Cellular Synapse

Localization

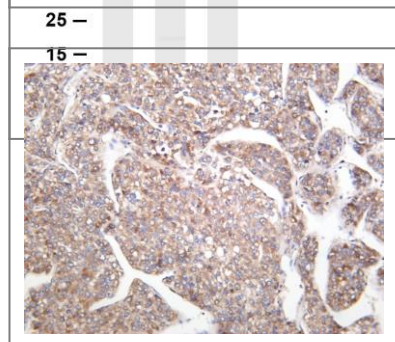
Function Function: Calcium/calmodulin-dependent protein kinase that functions autonomously after Ca(2+)/calmodulin-binding and autophosphorylation, and is involved in various processes, such as synaptic plasticity, neurotransmitter release and long-term potentiation . Member of the NMDAR signaling complex 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

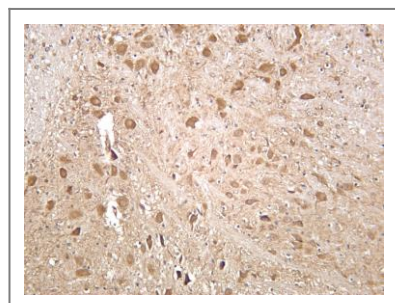


Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-CaMKII α (ANT0000R) antibody. The HRPconjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: SH-SY5Y Lane 2: Rat brain Lane 3: Mouse brain Predicted band size: 54kDa Observed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

For Research use only, not for diagnostics and clinical use
Contact Antagene Inc Tel 1-866-964-2589 Email: info@antageneinc.com