CAMK2A Rabbit mAb

Catalog No.: A22611 Recombinant 1 Publications



Basic Information

Observed MW

50kDa

Calculated MW

54kDa

Category

SMab Recombinant Monoclonal Antibody

Applications

WB,IF/ICC,ELISA

Cross-Reactivity

Human, Mouse, Rat

CloneNo number

ARC57333

Background

The product of this gene 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. Several transcript variants encoding distinct isoforms have been identified for this gene.

Recommended Dilutions

WB 1:1000 - 1:4000

IF/ICC 1:800 - 1:3200

ELISA Recommended starting

concentration is 1 µg/mL. Please optimize the concentration based on your specific

assay requirements.

Immunogen Information

Gene ID815

Swiss Prot
Q9UQM7

Immunogen

A synthetic peptide corresponding to a sequence within amino acids 201-300 of human CAMK2A(NP_741960.1).

Synonyms

CAMKA; MRD53; MRT63; CaMKIIalpha; CaMKIINalpha; CAMK2A

Contact

www.abclonal.com

Product Information

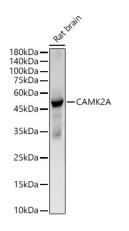
SourceIsotypePurificationRabbitIgGAffinity purification

Storage

Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS with 0.09% Sodium azide, 0.05% BSA, 50% glycerol, pH7.3.

Validation Data



Western blot analysis of lysates from Rat brain, using CAMK2A Rabbit mAb (A22611) at 1:1000 dilution.

Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000

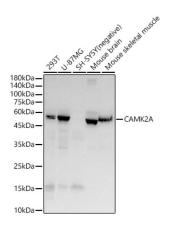
dilution.

Lysates/proteins: 25µg per lane.

Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Basic Kit (RM00020).

Exposure time: 30s.



Western blot analysis of various lysates, using CAMK2A Rabbit mAb (A22611) at 1:1000 dilution.

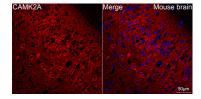
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.

Lysates/proteins: 25µg per lane.

Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Basic Kit (RM00020).

Exposure time: 60s.



Confocal imaging of paraffinembedded Mouse brain tissue using CAMK2A Rabbit mAb (A22611, dilution 1:800) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). DAPI was used for nuclear staining (Blue). Objective: 40x. Perform microwave antigen retrieval with 0.01 M citrate buffer (pH 6.0) prior to IF staining.