


Anti-CaMKII alpha antibody [6G9] ab22609

★★★★★ 6 Abreviews 78 References 2 Images

Overview

Product name	Anti-CaMKII alpha antibody [6G9]
Description	Mouse monoclonal [6G9] to CaMKII alpha
Host species	Mouse
Tested applications	Suitable for: IHC-P, WB
Species reactivity	Reacts with: Mouse, Rat, Human Predicted to work with: Cow 
Immunogen	Full length native protein (purified). This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: Human, rat, and mouse whole brain tissue lysates; IHC-P: Rat normal brain FFPE tissue sections.
General notes	<p>This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or conjugation for your experiments, please contact orders@abcam.com.</p> <p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Storage buffer	pH: 7.40 Preservative: 0.02% Sodium azide Constituents: PBS, 6.97% L-Arginine
Purity	Protein G purified
Clonality	Monoclonal
Clone number	6G9
Isotype	IgG1

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab22609 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-P		Use at an assay dependent concentration.
WB	★★★★☆ (4)	Use a concentration of 1 - 5 µg/ml. Detects a band of approximately 50 kDa (predicted molecular weight: 56 kDa).

Target

Function

CaM-kinase II (CAMK2) is a prominent kinase in the central nervous system that may function in long-term potentiation and neurotransmitter release. Member of the NMDAR signaling complex in excitatory synapses it may regulate NMDAR-dependent potentiation of the AMPAR and synaptic plasticity.

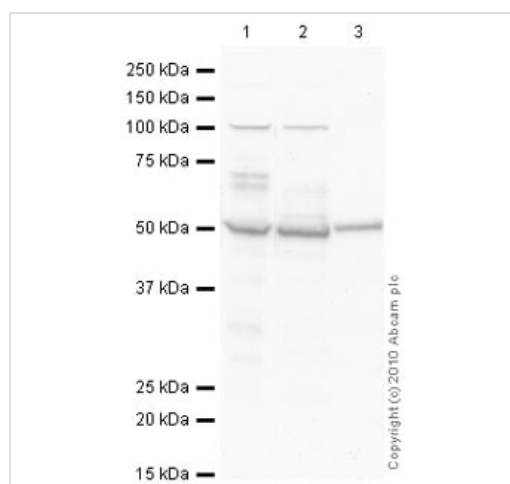
Sequence similarities

Belongs to the protein kinase superfamily. CAMK Ser/Thr protein kinase family. CaMK subfamily. Contains 1 protein kinase domain.

Cellular localization

Cell junction > synapse > presynaptic cell membrane. Cell junction > synapse. Postsynaptic lipid rafts.

Images



Western blot - Anti-CaMKII alpha antibody [6G9] (ab22609)

All lanes : Anti-CaMKII alpha antibody [6G9] (ab22609) at 10 µg/ml

Lane 1 : Brain (Rat) Tissue Lysate

Lane 2 : Brain (Mouse) Tissue Lysate

Lane 3 : Brain (Human) Tissue Lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat polyclonal to Mouse IgG - H&L - Pre-Adsorbed (HRP) at 1/5000 dilution

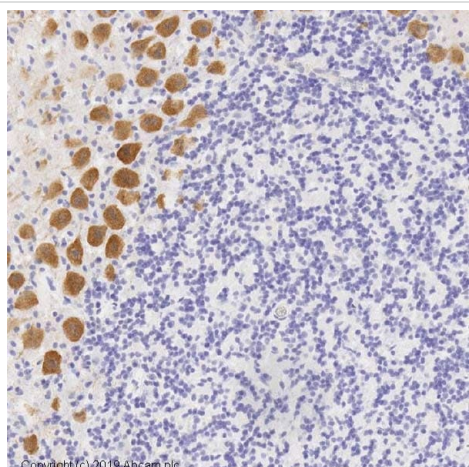
Performed under reducing conditions.

Predicted band size: 56 kDa

Observed band size: 50 kDa

Additional bands at: 100 kDa, 65 kDa, 70 kDa. We are unsure as to the identity of these extra bands.

Exposure time: 5 minutes



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CaMKII alpha antibody [6G9] (ab22609)

IHC image of ab22609 staining in Rat normal brain (Purkinje cells, cerebellum) formalin fixed paraffin embedded tissue section, performed on a Leica BondTM system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab22609, 1µg/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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