

Mouse anti-Human, Rat CaMKII Monoclonal Antibody | anti-CaMKII antibody

Anti-CaMKII Mouse mAb

CATALOG # AAA14148	HOST Mouse	REACTIVITY Human, Rat	APPLICATIONS Western Blot
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PRODUCT SYNONYMS

CaMKII; Monoclonal Antibody; Anti-CaMKII Mouse mAb; x Calcium/calmodulin dependent protein kinase II alpha; Calcium/calmodulin dependent protein kinase II beta; Calcium/calmodulin dependent protein kinase II delta; Calcium/calmodulin dependent protein kinase II gamma; Calcium/calmodulin-dependent protein kinase type II subunit alpha; CaM kinase II alpha; CaM kinase II; CaM kinase II beta; CaM kinase II delta; CaM kinase II gamma; CaM kinase II subunit alpha; CaMK-II subunit alpha; CAMK2; Camk2a; CAMK2B; CAMK2D; CAMK2G; CAMKA; KCC2A_HUMAN; anti-CaMKII antibody

PRODUCT SPECIFICATIONS

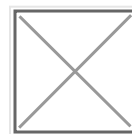
Host	Mouse
Reactivity	Human, Rat
Clonality	Monoclonal
Isotype	IgG1
Clone Number	3D1-G8-D5
Form/Format	Purified antibody in PBS with 0.05% sodium azide.
Sequence Length	495
Applicable Applications for anti-CaMKII antibody	WB (Western Blot)
Immunogen	Purified recombinant fragment of human CAMK2G (AA: 322-481) expressed in E Coli.
Sequence Similarities	Contains 1 protein kinase domain.
Subunit Structure	CAMK2 is composed of 4 different chains: alpha (CAMK2A), beta (CAMK2B), gamma (CAMK2G), and delta (CAMK2D). The different isoforms assemble into homo- or heteromultimeric holoenzymes composed of 12 subunits with two hexameric rings stacked one on top of the other.
Subcellular Location	Sarcoplasmic reticulum membrane; Peripheral membrane protein; Cytoplasmic side

IMAGES



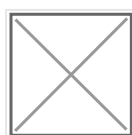
IHC (Immunohistochemistry)

Immunohistochemical analysis of paraffin-embedded bladder cancer tissues using CAMK2G mouse mAb with DAB staining.



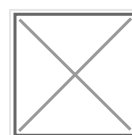
IHC (Immunohistochemistry)

Immunohistochemical analysis of paraffin-embedded prostate cancer tissues using CAMK2G mouse mAb with DAB staining.



FCM (Flow Cytometry)

Flow cytometric analysis of Jurkat cells using CAMK2G mouse mAb (green) and negative control (red).



WB (Western Blot)

Western blot analysis using CAMK2G mouse mAb against PC-12 (1), Jurkat (2), T47D (3), HepG2 (4) cell lysate.

**WB (Western Blot)**

Western blot analysis using CAMK2G mAb against HEK293 (1) and CAMK2G (AA)

**WB (Western Blot)**

Western blot analysis of extracts from Jurkat, A549, MCF7, C6 and HeLa cell lysates using CaMKII mouse mAb (1:1000 diluted). Predicted band size: 63kDa. Observed band size: 63kDa.

ADDITIONAL INFORMATION**Related Product Information for anti-CaMKII antibody**

Entrez Summary: The product of this gene is one of the four subunits of an enzyme which belongs to the serine/threonine protein kinase family, and to the Ca (2+)/calmodulin-dependent protein kinase subfamily. Calcium signaling is crucial for several aspects of plasticity at glutamatergic synapses. In mammalian cells the enzyme is composed of four different chains: alpha, beta, gamma, and delta. The product of this gene is a gamma chain. Many alternatively spliced transcripts encoding different isoforms have been described but the full-length nature of all the variants has not been determined.[provided by RefSeq, Mar 2011]

UniProt Summary Function: Calcium/calmodulin-dependent protein kinase that functions autonomously after Ca (2+)/calmodulin-binding and autophosphorylation, and is involved in sarcoplasmic reticulum Ca (2+) transport in skeletal muscle and may function in dendritic spine and synapse formation and neuronal plasticity. In slow-twitch muscles, is involved in regulation of sarcoplasmic reticulum (SR) Ca (2+) transport and in fast-twitch muscle participates in the control of Ca (2+) release from the SR through phosphorylation of the ryanodine receptor-coupling factor triadin. In neurons, may participate in the promotion of dendritic spine and synapse formation and maintenance of synaptic plasticity which enables long-term potentiation (LTP) and hippocampus-dependent learning.

NCBI AND UNIPROT INFORMATION

NCBI GI #	26667191
NCBI GeneID	818
NCBI Accession #	NP_001213.2
NCBI GenBank Nucleotide #	NM_001222.3
UniProt Accession #	Q13555; O00561; O15378; Q13279; Q13282; Q13556; Q5SQZ3; Q5SQZ4; Q5SWX4; Q7KYX5; Q8N4I3; Q8NIA4
Molecular Weight	63kDa
NCBI Official Full Name	calcium/calmodulin-dependent protein kinase type II subunit gamma isoform 4
NCBI Official Synonym Full Names	calcium/calmodulin dependent protein kinase II gamma
NCBI Official Symbol	CAMK2G
NCBI Official Synonym Symbols	CAMK; CAMKG; CAMK-II
NCBI Protein Information	calcium/calmodulin-dependent protein kinase type II subunit gamma
UniProt Protein Name	Calcium/calmodulin-dependent protein kinase type II subunit gamma
UniProt Gene Name	CAMK2G
UniProt Synonym Gene Names	CAMK; CAMK-II; CAMKG; CaM kinase II subunit gamma; CaMK-II subunit gamma

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/monoclonal/camkii-antibody-clone-3d1-g8-d5-western-blot-elisa/14148>