

Rabbit anti-Human, Mouse CaMKIIbeta/gamma Polyclonal Antibody | anti-CAMK2G antibody

CaMKIIbeta/gamma Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA322492	Rabbit	Human, Mouse	ELISA, Immunocytochemistry, Immunofluorescence, Western Blot

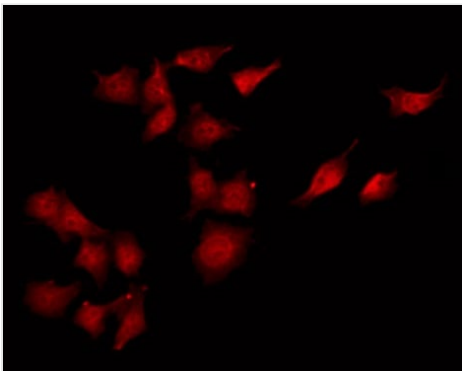
PRODUCT SYNONYMS

CaMKIIbeta/gamma; Polyclonal Antibody; CaMKIIbeta/gamma Antibody; CaM kinase II; CaM kinase II gamma chain; CaM kinase II subunit gamma; CAMK; CAMK II; CaMK II subunit gamma; CAMK2G; CAMKG; CAMKII; Calcium/calmodulin-dependent protein kinase type II subunit alpha; Calcium/calmodulin-dependent protein kinase type II subunit delta; CaM kinase II subunit alpha; CaM kinase II subunit delta; CAM2; CaMK-II subunit alpha; CaMK-II subunit delta; CAMK2A; CAMK2B; CAMKA; CAMKB; CAMKD; CaMKII alpha; KIAA0968; anti-CAMK2G antibody

PRODUCT SPECIFICATIONS

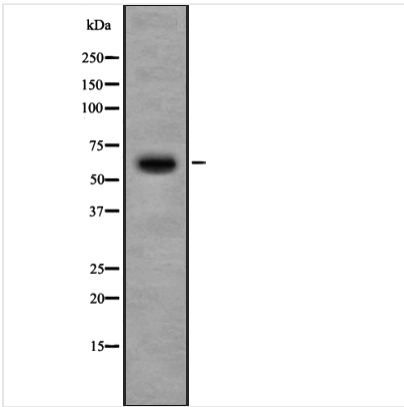
Host	Rabbit
Reactivity	Human, Mouse
Clonality	Polyclonal
Isotype	IgG
Specificity	CaMKIIbeta/gamma antibody detects endogenous levels of total CaMKIIbeta/gamma
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	539
Applicable Applications for anti-CAMK2G antibody	ELISA, ICC (Immunocytochemistry), IF (Immunofluorescence), WB (Western Blot)
Immunogen	A synthesized peptide derived from human CaMKIIbeta/gamma
Subcellular Location	Cell Membrane
Tissue Specificity	Expressed in skeletal muscle.
Predicted Cross Reactivity	Pig, Bovine, Horse, Sheep, Rabbit, Dog, Chicken, Xenopus
Similarity	Pig (100%), Bovine (100%), Horse (100%), Sheep (100%), Rabbit (100%), Dog (100%), Chicken (90%), Xenopus (90%)
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



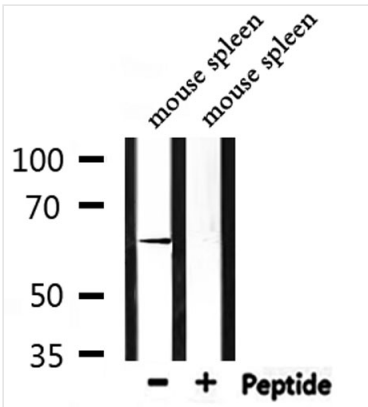
IF (Immunofluorescence)

AAA322492 staining COLO205 by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25 degree C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37 degree C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) Ab, diluted at 1/600, was used as the secondary antibody.



WB (Western Blot)

Western blot analysis of CaMKIIbeta/gamma using COLO205 whole cell lysates



WB (Western Blot)

Western blot analysis of extracts from mouse spleen, using CaMKIIbeta/gamma Antibody.

ADDITIONAL INFORMATION

Related Product Information for anti-CAMK2G antibody

Function: Calcium/calmodulin-dependent protein kinase that functions autonomously after Ca2+/calmodulin-binding and autophosphorylation, and is involved in sarcoplasmic reticulum Ca2+ 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) Ca2+ transport and in fast-twitch muscle participates in the control of Ca2+ 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.

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.

Post-translational Modifications: Autophosphorylation of Thr-287 following activation by Ca2+/calmodulin. Phosphorylation of Thr-287 locks the kinase into an activated state.

Similarity: The CAMK2 protein kinases contain a unique C-terminal subunit association domain responsible for oligomerization. Belongs to the protein kinase superfamily. CAMK Ser/Thr protein kinase family. CaMK subfamily.

NCBI AND UNIPROT INFORMATION

NCBI GI #	325197141
NCBI GeneID	818
NCBI Accession #	NP_001191421.1

NCBI GenBank Nucleotide #	NM_001204492.1
UniProt Accession #	Q13555; O00561; O15378; Q13279; Q13282; Q13556; Q5SQZ3; Q5SQZ4; Q5SWX4; A0A0A0MS52; A0A0A0MT11
Molecular Weight	Observed: 62 kDa Predicted: 63 kDa
NCBI Official Full Name	calcium/calmodulin-dependent protein kinase type II subunit gamma isoform 7
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/polyclonal/camkiibeta-gamma-antibody-immunocytochemistry-immunofluorescence-western-blot-elisa/322492>