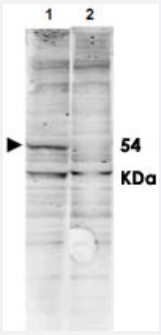
CAMK2G polyclonal antibody

Catalog # PAB9984 Size 100 ug

Applications



Western Blot (Tissue lysate)

Western blot using CAMK2G polyclonal antibody (Cat # PAB9984) shows detectionof a band ~54 KDa corresponding to human CAMK2G (arrowhead lane 1).
Specific reactivity with this band is blocked when the antibody is pre-incubated with the immunizing peptide (Lane 2).
Approximately 35 ug of a mouse brain tissue lysate was separated by 4-20% SDS-PAGE and transferred onto nitrocellulose.
CAMK2G was similarly detected on lysates from rat brain (not shown).
After blocking the membrane was probed with the primary antibody diluted to 1 : 1,500 for 2h at room temperature followed by washes and reaction with a 1 : 10,000 dilution of IRDye™800 conjugated Gt-a-Rabbit IgG [H&L] MX for 45 min at room temperature.
IRDye™800 fluorescence image was captured using the Odyssey® Infrared Imaging System developed by LI-COR.
IRDye is a trademarkof LI-COR, Inc.

Specification

Product Description	Rabbit polyclonal antibody raised against synthetic peptide of CAMK2G.
Immunogen	A synthetic peptide corresponding to amino acids 6-23 of human CAMK2G.
Host	Rabbit
Reactivity	Chicken, Dog, Frog, Human, Mouse, Orangutan, Pig, Rabbit, Rat
Form	Liquid
Quality Control Testing	Antibody Reactive Against Synthetic Peptide.

Recommend Usage	ELISA (1:4000-1:20000) Western Blot (1:1000-1:3000) The optimal working dilution should be determined by the end user.
Storage Buffer	In 20 mM KH_2PO_4, 150 mM NaCl, pH 7.2 (0.01% sodium azide)
Storage Instruction	Store at 4°C. For long term storage store at -20°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only.

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- Enzyme-linked Immunoabsorbent Assay

Gene Info — CAMK2G

Entrez GeneID	818
Protein Accession#	Q9UQM7(Human);P11798(Mouse);P11275(Rat)
Gene Name	CAMK2G
Gene Alias	CAMK, CAMK-II, CAMKG, FLJ16043, MGC26678
Gene Description	calcium/calmodulin-dependent protein kinase II gamma
Omim ID	602123
Gene Ontology	Hyperlink

Gene Summary	The product of this gene 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 o f plasticity at glutamatergic synapses. In mammalian cells the enzyme is composed of four differe nt chains: alpha, beta, gamma, and delta. The product of this gene is a gamma chain. Six alternati vely spliced variants that encode six different isoforms have been characterized to date. Addition al alternative splice variants that encode different isoforms have been described, but their full-leng th nature has not been determined. [provided by RefSeq
Other Designations	CaM kinase II|OTTHUMP00000019843|OTTHUMP00000019844|calcium/calmodulin-dependent protein kinase (CaM kinase) II gamma

Publication Reference

- Synaptic vesicle-associated Ca2+/calmodulin-dependent protein kinase II is a binding protein for synapsin I.

  Benfenati F, Valtorta F, Rubenstein JL, Gorelick FS, Greengard P, Czernik AJ.

  Nature 1992 Oct; 359(6394):417.

  Application: RIA, Recombinant proteins

- Sequence analysis and DNA-protein interactions within the 5' flanking region of the Ca2+/calmodulin-dependent protein kinase II alpha-subunit gene.

  Sunyer T, Sahyoun N.

  PNAS 1990 Jan; 87(1):278.

- Ca2+/calmodulin-dependent protein kinase II: identification of threonine-286 as the autophosphorylation site in the alpha subunit associated with the generation of Ca2+-independent activity.

  Thiel G, Czernik AJ, Gorelick F, Nairn AC, Greengard P.

  PNAS 1989 Sep; 85(17):6337.

Pathway

- Calcium signaling pathway
- ErbB signaling pathway
- Glioma
- GnRH signaling pathway
- Long-term potentiation
- Melanogenesis

- Neurotrophin signaling pathway
- Olfactory transduction
- Wnt signaling pathway

Disease

- Alzheimer disease
- Cardiovascular Diseases
- Cerebral Amyloid Angiopathy
- Diabetes Mellitus
- Edema
- Genetic Predisposition to Disease
- Neuroblastoma