

Datasheet for ABIN7317051
CAMK1G Protein (GST tag,His tag)[Go to Product page](#)

1 Image

Overview

Quantity:	50 µg
Target:	CAMK1G
Origin:	Human
Source:	Baculovirus infected Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This CAMK1G protein is labelled with GST tag,His tag.

Product Details

Purpose:	Recombinant Human CAMK1G/CaMKI gamma Protein (His & GST Tag)
Sequence:	Met 1-Met 476
Characteristics:	A DNA sequence encoding the human CAMK1G isoform 1 (Q96NX5-1) (Met 1-Met 476) was fused with the N-terminal polyhistidine-tagged GST tag at the N-terminus.
Purity:	> 85 % as determined by reducing SDS-PAGE.
Endotoxin Level:	< 1.0 EU per µg as determined by the LAL method.

Target Details

Target:	CAMK1G
Alternative Name:	CAMK1G/CaMKI gamma (CAMK1G Products)
Background:	Background: Calmodulin-Dependent Protein Kinase (CaM Kinase) is a kind of protein phosphorylate multiple downstream targets. Concentration of cytosolic calcium functions as a second messenger that mediates a wide range of cellular responses. Calcium binds to calcium

Target Details

binding proteins (calmodulin/CaM) and stimulates the activity of a variety of enzymes, including CaM kinases referred to as CaM-kinases (CaMKs), such as CaMKI, CaMKII, CaMKIV and CaMKK. Calmodulin-dependent protein kinase CL3/CaMKI γ is a membrane-anchored CaMK belonging to the CaM kinase family. Its C-terminal region is uniquely modified by two sequential lipidification steps: prenylation followed by a kinase-activity-regulated palmitoylation. These modifications are essential for CaMKI γ membrane anchoring and targeting into detergent-resistant lipid microdomains in the dendrites. It has been found that CaMKI γ critically contributed to BDNF-stimulated dendritic growth. Raft insertion of CaMKI γ specifically promoted dendritogenesis of cortical neurons by acting upstream of RacGEF STEF and Rac, both present in lipid rafts. Thus, CaMKI γ may represent a key element in the Ca²⁺-dependent and lipid-raft-delineated switch that turns on extrinsic activity-regulated dendrite formation in developing cortical neurons.

Synonym: CLICK3;CLICKIII;dJ272L16.1;RP1-272L16.2;VWS1

Molecular Weight:	81 kDa
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Application Details

Restrictions:	For Research Use only
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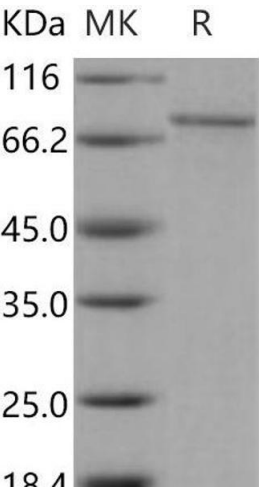
Handling

Format:	Frozen, Liquid
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Buffer:	Supplied as sterile 50 mM Tris, 100 mM NaCl, pH 8.0, 20 % glycerol, 0.3 mM DTT
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Storage:	-20 °C
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Storage Comment:	Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.
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Western Blotting

Image 1.