Datasheet for ABIN7317091

CAMK1D Protein (GST tag)

1 Image

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Overview

Quantity:	50 µg
Target:	CAMK1D
Origin:	Human
Source:	Baculovirus infected Insect Cells
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This CAMK1D protein is labelled with GST tag.

Product Details

Purpose:	Recombinant Human CAMK1D Protein (GST Tag)(Active)
Sequence:	Met 1-Lys 385
Characteristics:	A DNA sequence encoding the human CAMK1D (NP_705718.1) (Met 1-Lys 385) was fused with the GST tag at the N-terminus.
Purity:	> 80 % as determined by reducing SDS-PAGE.
Endotoxin Level:	< 1.0 EU per µg as determined by the LAL method.
Biological Activity Comment:	The specific activity was determined to be 70 nmol/min/mg using Autocamtide-2 synthetic peptide (KKALRRQETVDAL-amide) as substrate.

Target Details

Target:	CAMK1D

Target Details

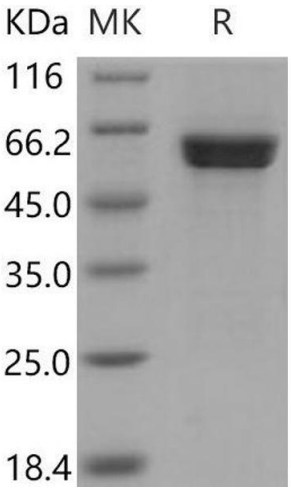
Alternative Name:	CAMK1D (CAMK1D Products)
Background:	Background: Calcium/calmodulin-dependent protein kinase or CaM kinases are serine/threonine-specific protein kinases that are primarily regulated by the Calcium/calmodulin complex. These kinases show a memory effect on activation. CaM kinases activity can outlast the intracellular calcium transient that is needed to activate it. In neurons, this property is important for the induction of synaptic plasticity. Pharmacological inhibition of CaM kinases II blocks the induction of long-term potentiation. Upon activation, CaM kinases II phosphorylates postsynaptic glutamate receptors and changes the electrical properties of the synapse. Calcium/calmodulin-dependent protein kinase type 1D, also known as CaM kinase I delta, CaM kinase ID, CaMKI-like protein kinase, CKLiK and CAMK1D, is a member of the protein kinase superfamily and CaMK subfamily. It contains one protein kinase domain. CAMK1D is broadly expressed. It is highly and mostly expressed in polymorphonuclear leukocytes (neutrophilic and eosinophilic granulocytes) while little or no expression is observed in monocytes and lymphocytes. Engineered overexpression of CAMK1D in non-tumorigenic breast epithelial cells led to increased cell proliferation, and molecular and phenotypic alterations indicative of epithelial-mesenchymal transition (EMT), including loss of cell-cell adhesions and increased cell migration and invasion. CAMK1D is a potential therapeutic target with particular relevance to clinically unfavorable basal-like tumors. Synonym: Calcium/calmodulin-dependent protein kinase type 1D; CaM kinase I delta; CaMKI-like protein kinase; CAMK1D; CaMK1 delta;CaM-K1;CKLiK
Molecular Weight:	69 kDa
NCBI Accession:	NP_705718

Application Details

Restrictions:	For Research Use only

Handling

Format:	Frozen, Liquid
Buffer:	Supplied as sterile 50 mM Tris, 100 mM NaCl, 0.5 mM Reduced Glutathione, pH 8.0
Storage:	-20 °C
Storage Comment:	Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.



Western Blotting

Image 1.