

DGK- ι Polyclonal Antibody

Catalog # AP69521

Product Information

Application	WB, IHC-P, IF, ICC, E
Primary Accession	O75912
Reactivity	Human, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	116233

Additional Information

Gene ID	9162
Other Names	DGKI; Diacylglycerol kinase iota; DAG kinase iota; Diglyceride kinase iota; DGK-iota
Dilution	WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/20000. Not yet tested in other applications. IHC-P~~N/A IF~~1:50~200 ICC~~N/A E~~N/A
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20°C

Protein Information

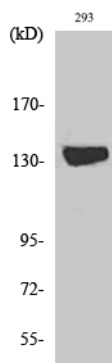
Name	DGKI (HGNC:2855)
Function	Diacylglycerol kinase that converts diacylglycerol/DAG into phosphatidic acid/phosphatidate/PA and regulates the respective levels of these two bioactive lipids (PubMed: 23949095 , PubMed: 9830018). Thereby, acts as a central switch between the signaling pathways activated by these second messengers with different cellular targets and opposite effects in numerous biological processes (Probable). Has probably no preference for any of the diacylglycerols in terms of the acyl chain composition, especially for the acyl chain at the sn-2 position (PubMed: 9830018). By controlling the diacylglycerol/DAG- mediated activation of RASGRP3, negatively regulates the Rap1 signaling pathway. May play a role in presynaptic diacylglycerol/DAG signaling and control neurotransmitter release during metabotropic glutamate receptor-dependent long-term depression (By similarity).
Cellular Location	Cell projection, axon {ECO:0000250 UniProtKB:F1MAB7}. Cell projection, dendrite {ECO:0000250 UniProtKB:F1MAB7}. Presynapse {ECO:0000250 UniProtKB:F1MAB7}. Postsynapse

{ECO:0000250|UniProtKB:F1MAB7}. Postsynaptic density
{ECO:0000250|UniProtKB:F1MAB7}. Synaptic cell membrane
{ECO:0000250|UniProtKB:F1MAB7}. Cytoplasmic vesicle, secretory vesicle,
synaptic vesicle membrane {ECO:0000250|UniProtKB:F1MAB7}. Cytoplasm,
cytosol. Nucleus. Note=Excluded from inhibitory synapses (By similarity).
Localization between cytoplasm and nucleus is regulated by protein kinase C
(PubMed:9830018). Both in the detergent soluble and particulate fractions (By
similarity) {ECO:0000250|UniProtKB:F1MAB7,
ECO:0000269|PubMed:9830018}

Tissue Location

Specifically expressed in brain and retina (PubMed:9830018). In brain, highly
expressed in hippocampus, caudate nucleus, occipital pole, cerebral cortex,
and cerebellum (PubMed:9830018). Also detected in kidney
(PubMed:15894621)

Images



Western Blot analysis of various cells using DGK- α
Polyclonal Antibody diluted at 1 : 1000

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.