

## **DGK-ι Polyclonal Antibody**

**Catalog # AP69521** 

# **Specification**

## DGK-ı Polyclonal Antibody - Product Information

**Application** WB. IHC-P. IF **Primary Accession** 075912 Reactivity Human, Rat Host Rabbit Clonality **Polyclonal** 

## DGK-I Polyclonal Antibody - 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

### **Format**

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

# **Storage Conditions**

-20°C

# **DGK-ι Polyclonal Antibody - 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: <a href="http://www.uniprot.org/citations/23949095" target="\_blank">23949095</a>, PubMed:<a href="http://www.uniprot.org/citations/9830018" target="\_blank">9830018</a>). 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:<a

href="http://www.uniprot.org/citations/9830018" target="\_blank">9830018</a>). 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**

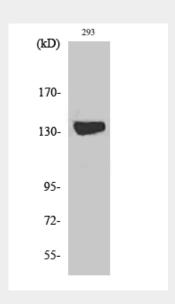
Specifically expressed in brain and retina (PubMed:9830018). In brain, highly expressed in hippocampus, caudate nucleus, occipital pole, cerebral cortex, and cerebellum (PubMed:9830018). Also detected in kidney (PubMed:15894621)

### **DGK-1 Polyclonal Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

### DGK-ı Polyclonal Antibody - Images



Western Blot analysis of various cells using DGK-ι Polyclonal Antibody diluted at 1□1000