

DGK- ι Polyclonal Antibody
Catalog # AP69521**Specification**

DGK- ι Polyclonal Antibody - Product Information

Application	WB, IHC-P, IF
Primary Accession	O75912
Reactivity	Human, Rat
Host	Rabbit
Clonality	Polyclonal

DGK- ι Polyclonal Antibody - Additional Information**Gene ID** 9162**Other Names**DGKI; Diacylglycerol kinase ι ; DAG kinase ι ; Diglyceride kinase ι ; DGK- ι **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: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}

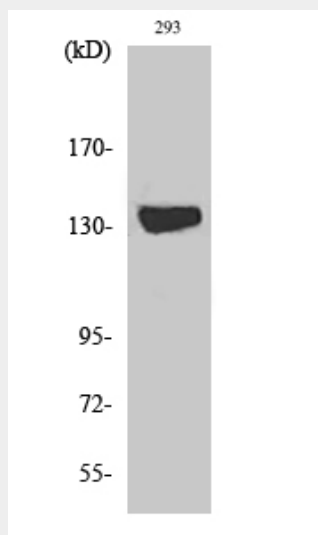
Tissue Location

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)

DGK- ι Polyclonal Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

DGK- ι Polyclonal Antibody - Images

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