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DGKB Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP8127a

Specification

DGKB Antibody (N-term) Blocking Peptide - Product Information

Primary Accession Q9Y6T7

DGKB Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 1607

Other Names
Diacylglycerol kinase beta, DAG kinase beta, 90 kDa diacylglycerol kinase, Diglyceride kinase beta, DGK-beta, DGKB, DAGK2, KIAA0718

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP8127a was selected from the N-term region of human DGKB . A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

DGKB Antibody (N-term) Blocking Peptide - Protein Information

Name DGKB

Synonyms DAGK2, KIAA0718

Function
Diacylglycerol kinase that converts diacylglycerol/DAG into phosphatidic acid/phosphatidate/PA and regulates the respective levels of these two bioactive lipids (PubMed:11719522). 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 a higher activity with long-chain diacylglycerols like 1,2-di-(9Z-octadecenoyl)-sn-glycerol compared to 1,2-didecanoyl-sn-glycerol (By similarity). Specifically expressed in brain, it regulates neuron-specific morphological changes including neurite branching and neurite spine formation (By similarity).

Cellular Location
Postsynaptic cell membrane {ECO:0000250|UniProtKB:Q6NS52}; Peripheral membrane protein {ECO:0000250|UniProtKB:Q6NS52}. Cell membrane; Peripheral membrane protein. Cytoplasm Note=Translocation to the plasma membrane is induced by phorbol esters

Tissue Location
[Isoform 1]: Specifically expressed in brain but also detected in uterus (PubMed:11719522). In adult brain, expressed in the amygdala, caudate nucleus, and hippocampus (PubMed:11719522)

DGKB Antibody (N-term) Blocking Peptide - Protocols

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

- Blocking Peptides

DGKB Antibody (N-term) Blocking Peptide - Images

DGKB Antibody (N-term) Blocking Peptide - Background

Diacylglycerol (DAG) is an allosteric activator of protein kinase C. DAG also participates in regulating RAS and RHO family proteins by activating the guanine nucleotide exchange factors VAV and RASGRP1. DAG is also involved in the synthesis of phospholipids and triacylglycerols. Tight regulation of DAG levels is achieved via DAG kinases (DGKs), which remove DAG by phosphorylate it to phosphatidic acid. Several mammalian isozymes of DAGK have been identified

DGKB Antibody (N-term) Blocking Peptide - References

Caricasole, A., et al., J. Biol. Chem. 277(7):4790-4796 (2002).