

DGKB Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP8127b

Specification

DGKB Antibody (C-term) - Product Information

Application Primary Accession Reactivity Host Clonality Isotype Antigen Region

WB, IHC-P,E <u>O9Y6T7</u> Human, Mouse Rabbit Polyclonal Rabbit IgG 773-804

DGKB Antibody (C-term) - 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

This DGKB antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 773-804 amino acids from the C-terminal region of human DGKB.

Dilution WB~~1:1000 IHC-P~~1:50~100 E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

DGKB Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

DGKB Antibody (C-term) - 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:<u>11719522</u>). 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 (C-term) - Protocols

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

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

DGKB Antibody (C-term) - Images



Western blot analysis of anti-hDGKB-T787 Pab (Cat. #AP8127b) in mouse liver tissue lysate. hDGKB-T787(arrow) was detected using the purified Pab.





DGKB Antibody (T787) (Cat. #AP8127b) western blot analysis in HepG2 cell line lysates (35ug/lane).This demonstrates the DGKB antibody detected the DGKB protein (arrow).



Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.

DGKB Antibody (C-term) - 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 (C-term) - References

Caricasole, A., et al., J. Biol. Chem. 277(7):4790-4796 (2002). DGKB Antibody (C-term) - Citations

 <u>Isolation of mouse pancreatic alpha, beta, duct and acinar populations with cell surface</u> <u>markers.</u>