

DGKA Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP8128b

Specification

DGKA Antibody (C-term) - Product Information

Application	WB, IHC-P,E
Primary Accession	<u>P23743</u>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	598-628

DGKA Antibody (C-term) - Additional Information

Gene ID 1606

Other Names Diacylglycerol kinase alpha, DAG kinase alpha, 80 kDa diacylglycerol kinase, Diglyceride kinase alpha, DGK-alpha, DGKA, DAGK, DAGK1

Target/Specificity

This DGKA antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 598-628 amino acids from the C-terminal region of human DGKA.

Dilution $WB \sim 1:1000$ $IHC-P \sim N/A$ $E \sim Use at an assay dependent concentration.$

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

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

DGKA Antibody (C-term) - Protein Information

Name DGKA

Synonyms DAGK, DAGK1



Function Diacylglycerol kinase that converts diacylglycerol/DAG into phosphatidic acid/phosphatidate/PA and regulates the respective levels of these two bioactive lipids (PubMed:<u>15544348</u>, PubMed:<u>2175712</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 (PubMed:<u>15544348</u>, PubMed:<u>2175712</u>). Also plays an important role in the biosynthesis of complex lipids (Probable). Can also phosphorylate 1-alkyl-2-acylglycerol in vitro as efficiently as diacylglycerol provided it contains an arachidonoyl group (PubMed:<u>15544348</u>). Also involved in the production of alkyl-lysophosphatidic acid, another bioactive lipid, through the phosphorylation of 1-alkyl-2-acetyl glycerol (PubMed:<u>22627129</u>).

Cellular Location Cytoplasm, cytosol.

Tissue Location Expressed in lymphocytes.

DGKA Antibody (C-term) - Protocols

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

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

DGKA Antibody (C-term) - Images



All lanes : Anti-DGKA Antibody (C-term) at 1:1000 dilution Lane 1: A431 whole cell lysate Lane 2: Jurkat whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 83 kDa Blocking/Dilution buffer: 5% NFDM/TBST.





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DGKA Antibody (C-term) - Background

Upon cell stimulation, the kinase DGKA converts the second messenger diacylglycerol into phophatidate, initiating the resynthesis of phosphatidylinositols and attenuating protein kinase C activity. DGKA is stimulated by calcium and phosphatidylserine, and is phosphorylated by protein kinase C. Tissue expression is in lymphocytes and oligodengroglial cells. DGKA contains 2 zinc-dependent phorbol-ester and DAG binding domains, and 2 EF-hand calcium binding domains.

DGKA Antibody (C-term) - References

Hart, T.C., et al., Genomics 22(1):246-247 (1994). Hart, T.C., et al., Mamm. Genome 5(2):123-124 (1994). Schaap, D., et al., FEBS Lett. 275 (1-2), 151-158 (1990).