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DGKA Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP8128a

Specification

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

Primary Accession P23743

DGKA Antibody (N-term) Blocking Peptide - 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
The synthetic peptide sequence used to generate the antibody AP8128a was selected from the N-term region of human DGKA . 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.

DGKA Antibody (N-term) Blocking Peptide - 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:15544348, PubMed:2175712). 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:15544348, PubMed:2175712). 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:15544348). Also involved in the production of alkyl-lysophosphatidic acid, another bioactive lipid, through the phosphorylation of 1-alkyl-2-acetyl glycerol (PubMed:22627129).

Cellular Location
Cytoplasm, cytosol.

Tissue Location
Expressed in lymphocytes.

DGKA Antibody (N-term) Blocking Peptide - Protocols

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

- Blocking Peptides

DGKA Antibody (N-term) Blocking Peptide - Images

DGKA Antibody (N-term) Blocking Peptide - 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 (N-term) Blocking Peptide - 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).