

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

DGKA Antibody (N-term) Blocking Peptide - Product InformationPrimary 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](/product/products/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: [2175712](http://www.uniprot.org/citations/2175712), PubMed: [15544348](http://www.uniprot.org/citations/15544348)). 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: [2175712](http://www.uniprot.org/citations/2175712), PubMed: [15544348](http://www.uniprot.org/citations/15544348)). 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 phosphatidate, 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 oligodendroglial 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).