

# Anti-DGK alpha Antibody

Rabbit polyclonal antibody to DGK alpha Catalog # AP59533

#### **Product Information**

**Application** WB, IF/IC, IHC

Primary Accession P23743

Reactivity Human, Monkey

HostRabbitClonalityPolyclonalCalculated MW82630

#### **Additional Information**

Gene ID 1606

Other Names DAGK; DAGK1; Diacylglycerol kinase alpha; DAG kinase alpha; 80 kDa

diacylglycerol kinase; Diglyceride kinase alpha; DGK-alpha

Target/Specificity Recognizes endogenous levels of DGK alpha protein.

**Dilution** WB~~WB (1/500 - 1/1000), IHC (1/100 - 1/200), IF/IC (1/100 - 1/500)

IF/IC~~N/A IHC~~WB (1/500 - 1/1000), IHC (1/100 - 1/200), IF/IC (1/100 -

1/500)

**Format** Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30%

glycerol, and 0.09% (W/V) sodium azide.

**Storage** Store at -20 °C.Stable for 12 months from date of receipt

### **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.

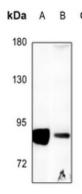
**Tissue Location** 

Expressed in lymphocytes.

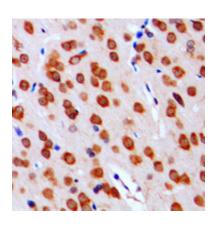
# **Background**

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human DGK alpha. The exact sequence is proprietary.

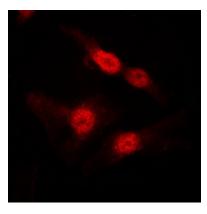
## **Images**



Western blot analysis of DGK alpha expression in EC9706 (A), Myla2059 (B) whole cell lysates.



Immunohistochemical analysis of DGK alpha staining in human brain formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of DGK alpha staining in MDCK cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a DyLight 594-conjugated secondary antibody (red) in PBS at room temperature in the dark.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.