

KD-Validated Anti-Diacylglycerol Kinase Alpha Mouse Monoclonal Antibody

Mouse monoclonal antibody Catalog # AGI1938

Specification

KD-Validated Anti-Diacylglycerol Kinase Alpha Mouse Monoclonal Antibody - Product Information

Application Primary Accession Reactivity Clonality Isotype Calculated MW Gene Name Aliases	WB, FC <u>P23743</u> Human Monoclonal Mouse IgG2a Predicted, 83 kDa, observed, 74 kDa KDa DGKA DGKA; Diacylglycerol Kinase Alpha;				
	Kinase, Alpha 80kDa; 80 KDa Diacylglycerol Kinase; Diglyceride Kinase				
	Alpha; DAG Kinase Alpha; EC 2.7.1.107; Diacylglycerol Kinase, Alpha (80kD); EC				
Immunogen	Recombinant protein of human DGKA				

KD-Validated Anti-Diacylglycerol Kinase Alpha Mouse Monoclonal Antibody - Additional Information

Gene ID 1606 **Other Names** Diacylglycerol kinase alpha, DAG kinase alpha, 2.7.1.107, 2.7.1.93, 80 kDa diacylglycerol kinase, Diglyceride kinase alpha, DGK-alpha, DGKA, DAGK, DAGK1

KD-Validated Anti-Diacylglycerol Kinase Alpha Mouse Monoclonal Antibody - 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.

KD-Validated Anti-Diacylglycerol Kinase Alpha Mouse Monoclonal Antibody - 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>

KD-Validated Anti-Diacylglycerol Kinase Alpha Mouse Monoclonal Antibody - Images



Western blotting analysis using anti-diacylglycerol kinase alpha antibody (Cat#AGI1938). Total cell lysates (30 μ g) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-diacylglycerol kinase alpha antibody (Cat#AGI1938, 1:5,000) and HRP-conjugated goat anti-mouse secondary antibody respectively.

kDa	N	40		kDa	st.	40	
250 -				250 -			
150 -				150 -			110
100 -				100 —			ologies
75 -				75 -	-		- Diacylglycerol kinase α
50 —	-	-	-β-Tubulin	50 -			C2024 Genuin Bi
37-				37 -			pyright
25-				25 - 20 -			Co



Western blotting analysis using anti-diacylglycerol kinase alpha antibody (Cat#AGI1938). Diacylglycerol kinase alpha expression in wild type (WT) and diacylglycerol kinase alpha (DGKA) knockdown (KD) HSHC cells with 20 μ g of total cell lysates. β -Tubulin serves as a loading control. The blot was incubated with anti-diacylglycerol kinase alpha antibody (Cat#AGI1938, 1:5,000) and HRP-conjugated goat anti-mouse secondary antibody respectively.



Diacylglycerol kinase alpha-Alexa Fluor® 647

Flow cytometric analysis of Diacylglycerol kinase alpha expression in HT-1080 cells using anti-Diacylglycerol kinase alpha antibody (Cat#AGI1938, 1:2,000). Green, isotype control; red, Diacylglycerol kinase alpha.