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DGKZ Antibody (aa601-650)
Rabbit Polyclonal Antibody
Catalog # ALS15446

Specification

DGKZ Antibody (aa601-650) - Product Information

Application	**IHC**
Primary Accession	Q13574
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**124kDa KDa**

DGKZ Antibody (aa601-650) - Additional Information

Gene ID 8525

Other Names
Diacylglycerol kinase zeta, DAG kinase zeta, 2.7.1.107, Diglyceride kinase zeta, DGK-zeta, DGKZ, DAGK6

Target/Specificity
DGKZ Antibody detects endogenous levels of total DGKZ protein.

Reconstitution & Storage
Store at -20°C for up to one year.

Precautions
DGKZ Antibody (aa601-650) is for research use only and not for use in diagnostic or therapeutic procedures.

DGKZ Antibody (aa601-650) - Protein Information

Name DGKZ (HGNC:2857)

Synonyms DAGK6

Function
Diacylglycerol kinase that converts diacylglycerol/DAG into phosphatidic acid/phosphatidate/PA and regulates the respective levels of these two bioactive lipids (PubMed:9159104, PubMed:15544348, PubMed:18004883, PubMed:19744926, PubMed:22108654, PubMed:22627129, PubMed:23949095). 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:9159104, PubMed:15544348, PubMed:18004883, PubMed:19744926, PubMed:22108654, PubMed:22627129, PubMed:23949095). Also plays an important role in the biosynthesis of complex lipids (Probable). Does not exhibit an acyl chain-dependent substrate specificity among diacylglycerol species (PubMed:9159104, PubMed:19744926, PubMed:22108654). Can also phosphorylate 1-alkyl-2-acylglycerol in vitro but less efficiently and with a preference for alkylacylglycerols containing an arachidonoyl group (PubMed:15544348, PubMed:19744926, PubMed:22627129). The biological processes it is involved in include T cell activation since it negatively regulates T-cell receptor signaling which is in part mediated by diacylglycerol (By similarity). By generating phosphatidic acid, stimulates PIP5KIA activity which regulates actin polymerization (PubMed:15157668). Through the same mechanism could also positively regulate insulin-induced translocation of SLC2A4 to the cell membrane (By similarity).

Cellular Location
Nucleus. Cytoplasm, cytosol. Cell membrane. Cell projection, lamellipodium

Tissue Location
Highest levels in brain, and substantial levels in skeletal muscle, heart, and pancreas.

Volume
50 µl

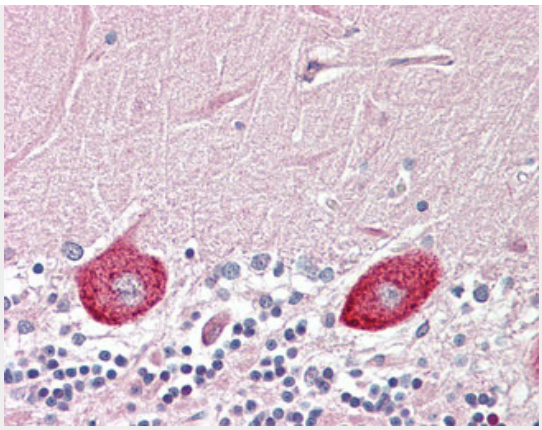
DGKZ Antibody (aa601-650) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

DGKZ Antibody (aa601-650) - Images

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Anti-DGKZ antibody IHC of human brain, cerebellum.

DGKZ Antibody (aa601-650) - Background

Displays a strong preference for 1,2-diacylglycerols over 1,3-diacylglycerols, but lacks substrate specificity among molecular species of long chain diacylglycerols. Isoform 2 but not isoform 1 regulates RASGRP1 activity.

DGKZ Antibody (aa601-650) - References

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Ota T.,et al.Nat. Genet. 36:40-45(2004).
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