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DGKG Antibody (C-term) Blocking Peptide

Synthetic peptide
Catalog # BP8124b

Specification

DGKG Antibody (C-term) Blocking Peptide - Product Information

Primary Accession P49619

DGKG Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 1608

Other Names
Diacylglycerol kinase gamma, DAG kinase gamma, Diglyceride kinase gamma, DGK-gamma, DGKG, DAGK3

Target/Specificity
The synthetic peptide sequence is selected from aa 778~791 of human DGKG.

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.

DGKG Antibody (C-term) Blocking Peptide - Protein Information

Name DGKG

Synonyms DAGK3

Function
Diacylglycerol kinase that converts diacylglycerol/DAG into phosphatidic acid/phosphatidate/PA and regulates the respective levels of these two bioactive lipids (PubMed:8034597). 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 (By similarity). Has no apparent specificity with regard to the acyl compositions of diacylglycerol (PubMed:8034597). Specifically expressed in the cerebellum where it controls the level of diacylglycerol which in turn regulates the activity of protein kinase C gamma. Through protein kinase C gamma, indirectly regulates the dendritic development of Purkinje cells, cerebellar long term depression and ultimately cerebellar motor coordination (By similarity).

Cellular Location
Membrane. Cytoplasm, cytosol. Cytoplasm, cytoskeleton {ECO:0000250|UniProtKB:P49620}

Tissue Location
Predominantly expressed in retina and in a much lesser extent in the brain. Other tissues contain extremely low levels of DGK-gamma

DGKG Antibody (C-term) Blocking Peptide - Protocols

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

- Blocking Peptides

DGKG Antibody (C-term) Blocking Peptide - Images

DGKG Antibody (C-term) Blocking Peptide - Background

Protein kinases are enzymes that transfer a phosphate group from a phosphate donor, generally the g phosphate of ATP, onto an acceptor amino acid in a substrate protein. By this basic mechanism, protein kinases mediate most of the signal transduction in eukaryotic cells, regulating cellular metabolism, transcription, cell cycle progression, cytoskeletal rearrangement and cell movement, apoptosis, and differentiation. With more than 500 gene products, the protein kinase family is one of the largest families of proteins in eukaryotes. The family has been classified in 8 major groups based on sequence comparison of their tyrosine (PTK) or serine/threonine (STK) kinase catalytic domains. The AGC kinase group consists of 63 kinases including the cyclic nucleotide-regulated protein kinase (PKA & PKG) family, the diacylglycerol-activated/phospholipid-dependent protein kinase C (PKC) family, the related to PKA and PKC (RAC/Akt) protein kinase family, the kinases that phosphorylate G protein-coupled receptors family (ARK), and the kinases that phosphorylate ribosomal protein S6 family (RSK).

DGKG Antibody (C-term) Blocking Peptide - References

Yamada, K., et al., Biochem. Biophys. Res. Commun. 305(1):101-107 (2003).Stohr, H., et al., Hum. Genet. 104(1):99-105 (1999).Kai, M., et al., J. Biol. Chem. 269(28):18492-18498 (1994).