

**DGKG Antibody (N-term) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP8124a**

**Specification**

**DGKG Antibody (N-term) Blocking Peptide - Product Information**

Primary Accession [P49619](#)

**DGKG Antibody (N-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 80~95 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 (N-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:<a href="http://www.uniprot.org/citations/8034597" target="\_blank">8034597</a>). 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:<a href="http://www.uniprot.org/citations/8034597" target="\_blank">8034597</a>). 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 (N-term) Blocking Peptide - Protocols**

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

- [Blocking Peptides](#)

**DGKG Antibody (N-term) Blocking Peptide - Images****DGKG Antibody (N-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 (N-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).