

DGKD Antibody (C-term) Blocking Peptide

Synthetic peptide Catalog # BP8126b

Specification

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

Primary Accession <u>Q16760</u>

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

Gene ID 8527

Other Names

Diacylglycerol kinase delta, DAG kinase delta, 130 kDa diacylglycerol kinase, Diglyceride kinase delta, DGK-delta, DGKD, KIAA0145

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP8126b was selected from the C-term region of human DGKD . A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

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.

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

Name DGKD (<u>HGNC:2851</u>)

DGKD 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-depende nt 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).

DGKD Antibody (C-term) Blocking Peptide - References

Sakane, F., et al., J. Biol. Chem. 271(14):8394-8401 (1996).Nagase, T., et al., DNA Res. 2(4):167-174 (1995).



Function

Diacylglycerol kinase that converts diacylglycerol/DAG into phosphatidic acid/phosphatidate/PA and regulates the respective levels of these two bioactive lipids (PubMed:12200442, 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 (Probable). By controlling the levels of diacylglycerol, regulates for instance the PKC and EGF receptor signaling pathways and plays a crucial role during development (By similarity). May also regulate clathrin-dependent endocytosis (PubMed:17880279).

Cellular Location

Membrane, clathrin-coated pit. Cytoplasm

Tissue Location

[Isoform 2]: Widely expressed.

DGKD Antibody (C-term) Blocking Peptide - Protocols

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

• Blocking Peptides