10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Mouse Pkdcc Antibody (N-term) Blocking Peptide

Synthetic peptide
Catalog # BP14694a

Specification

Mouse Pkdcc Antibody (N-term) Blocking Peptide - Product Information

Primary Accession Q5RJI4

Mouse Pkdcc Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 106522

Other Names
Extracellular tyrosine-protein kinase PKDCC, Protein kinase domain-containing protein, cytoplasmic {ECO:0000312|MGI:MGI:2147077}, Protein kinase-like protein SgK493, Sugen kinase 493, Vertebrate lonesome kinase, Pkdcc {ECO:0000312|MGI:MGI:2147077}

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.

Mouse Pkdcc Antibody (N-term) Blocking Peptide - Protein Information

Name Pkdcc {ECO:0000312|MGI:MGI:2147077}

Function
Secreted tyrosine-protein kinase that mediates phosphorylation of extracellular proteins and endogenous proteins in the secretory pathway, which is essential for patterning at organogenesis stages. Mediates phosphorylation of MMP1, MMP13, MMP14, MMP19 and ERP29 (PubMed:25171405). May also have serine/threonine protein kinase activity (PubMed:25171405). Required for longitudinal bone growth through regulation of chondrocyte differentiation (PubMed:19097194, PubMed:23792766). May be indirectly involved in protein transport from the Golgi apparatus to the plasma membrane (PubMed:19465597). Probably plays a role in platelets: rapidly and quantitatively secreted from platelets in response to stimulation of platelet degranulation (PubMed:25171405).

Cellular Location

Secreted. Golgi apparatus. Note=Both secreted and present in the Golgi apparatus.

Tissue Location
Strongly expressed in adult heart, liver and testis with weak expression in brain, spleen, lung and thymus. In the humerus, strongly expressed in early flat proliferative chondrocytes. In the embryo, expressed in the anterior visceral endoderm and anterior primitive streak at 6.5 dpc. At 7.5 dpc, expressed in the anterior definitive endoderm (ADE) and anterior mesoderm but not in the notochord. At 8.0 dpc, expressed in the ADE and anterior embryonic mesoderm. At 8.5 dpc, expressed more broadly in anterior tissues and at the midline of the neural plate in the midbrain region as well as the lateral margins of the neural plate posterior to the metencephalic region. Also weakly expressed in the anterior mesenchyme. At 9.5 dpc, strongest expression in branchial arches and limb buds. During mid- gestation, expression continues in mesenchymal cells, particularly in areas where these cells condense.

Mouse Pkdcc Antibody (N-term) Blocking Peptide - Protocols

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

- Blocking Peptides

Mouse Pkdcc Antibody (N-term) Blocking Peptide - Images

Mouse Pkdcc Antibody (N-term) Blocking Peptide - Background

Protein kinase which is required for longitudinal bone growth through regulation of chondrocyte differentiation. Involved in protein transport from the Golgi apparatus to the plasma membrane.

Mouse Pkdcc Antibody (N-term) Blocking Peptide - References

Kinoshita, M., et al. Development 136(12):2069-2079(2009)Sewell, W., et al. Dev. Biol. 329(2):400-409(2009)Imuta, Y., et al. Dev. Dyn. 238(1):210-222(2009)Tchernev, V.T., et al. Genomics 40(1):170-174(1997)