

GK Antibody (N-term) Blocking peptide
Synthetic peptide
Catalog # BP12927a**Specification**

GK Antibody (N-term) Blocking peptide - Product InformationPrimary Accession [P32189](#)**GK Antibody (N-term) Blocking peptide - Additional Information****Gene ID** 2710**Other Names**

Glycerol kinase, GK, Glycerokinase, ATP:glycerol 3-phosphotransferase, GK

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.

GK Antibody (N-term) Blocking peptide - Protein Information**Name** GK ([HGNC:4289](#))**Function**

Kinase that plays a key role in glycerol metabolism, catalyzing its phosphorylation to produce sn-glycerol 3-phosphate. Sn- glycerol 3-phosphate is a crucial intermediate in various metabolic pathways, such as the synthesis of glycerolipids and triglycerides, glycogenesis, glycolysis and gluconeogenesis.

Cellular Location

Mitochondrion outer membrane; Single-pass membrane protein. Nucleus. Cytoplasm, cytosol. Note=Glycerol kinase activity is more cytosolic in some tissues. It probably represents the expression of isoforms lacking a transmembrane domain [Isoform 4]: Cytoplasm, cytosol. Note=In adult tissues, such as liver the glycerol kinase activity is more cytosolic. It probably represents the expression of this isoform which lacks a transmembrane domain

Tissue Location

[Isoform 2]: Widely expressed in fetal and adult tissues. [Isoform 4]: The sole isoform expressed in adult liver and kidney.

GK Antibody (N-term) Blocking peptide - Protocols

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

- [Blocking Peptides](#)

GK Antibody (N-term) Blocking peptide - Images

GK Antibody (N-term) Blocking peptide - Background

The product of this gene belongs to the FGGY kinase family of proteins and encodes glycerol kinase. Glycerol kinase is a key enzyme in the regulation of glycerol uptake and metabolism. It catalyzes the phosphorylation of glycerol by ATP, yielding ADP and glycerol-3-phosphate. Defects in this gene are the cause of glycerol kinase deficiency (GKD). Alternatively spliced transcript variants encoding different isoforms have been identified.

GK Antibody (N-term) Blocking peptide - References

Lu, Y., et al. J. Lipid Res. 49(12):2582-2589(2008) Zhang, Y.H., et al. Pediatr. Res. 59 (4 PT 1), 590-592 (2006) :Ohira, R.H., et al. Biochem. Biophys. Res. Commun. 331(1):239-246(2005) Stepanian, S.V., et al. Mol. Genet. Metab. 80(4):412-418(2003) Hellerud, C., et al. Clin. Chem. Lab. Med. 41(1):46-55(2003)