

Glycerol kinase (GPK2) Antibody (C-term) Blocking peptide
Synthetic peptide
Catalog # BP7131b**Specification**

Glycerol kinase (GPK2) Antibody (C-term) Blocking peptide - Product InformationPrimary Accession [Q14410](#)**Glycerol kinase (GPK2) Antibody (C-term) Blocking peptide - Additional Information****Gene ID** 2712**Other Names**

Glycerol kinase 2, GK 2, Glycerokinase 2, ATP:glycerol 3-phosphotransferase 2, Glycerol kinase, testis specific 2, GK2, GKP2, GKTA

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP7131b](/product/products/AP7131b) was selected from the C-term region of human GPK2. 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.

Glycerol kinase (GPK2) Antibody (C-term) Blocking peptide - Protein Information**Name** GK2**Synonyms** GKP2, GKTA**Function**

Key enzyme in the regulation of glycerol uptake and metabolism. Essential for male fertility and sperm mitochondrial sheath formation (By similarity). Required for proper arrangement of crescent-like mitochondria to form the mitochondrial sheath during spermatogenesis (By similarity). Can induce mitochondrial clustering through interactions with PLD6 and up-regulation of phosphatidic acid synthesis in the mitochondria (PubMed: <http://www.uniprot.org/citations/28852571>).

Cellular Location

Mitochondrion outer membrane {ECO:0000250|UniProtKB:Q9WU65}; Single-pass type IV

membrane protein {ECO:0000250|UniProtKB:Q9WU65}. Cytoplasm. Note=In sperm the majority of the enzyme is bound to mitochondria {ECO:0000250|UniProtKB:Q9WU65}

Tissue Location

Testis-specific (PubMed:33536340). Expressed in the midpiece of spermatozoa (PubMed:28852571)

Glycerol kinase (GPK2) Antibody (C-term) Blocking peptide - Protocols

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

- [Blocking Peptides](#)

Glycerol kinase (GPK2) Antibody (C-term) Blocking peptide - Images**Glycerol kinase (GPK2) Antibody (C-term) Blocking peptide - Background**

The human glycerol kinase gene family consists of at least 3 expressed loci. The GK1 locus on Xp21.3 is the site of mutations (deletions) causing glycerol kinase deficiency. It comprises 19 exons and is probably ancestral to several other genes which, because they are intronless, are suspected of having arisen by reverse transcriptase mediated events. These include 2 genes on chromosome 4. They are expressed as a single mRNA species in testis where expression is at a high level.

Glycerol kinase (GPK2) Antibody (C-term) Blocking peptide - References

Sargent, C.A., et al., Hum. Mol. Genet. 3(8):1317-1324 (1994).