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GK Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP12927A

Specification

GK Antibody (N-term) - Product Information

Application	**IHC-P, WB,E**
Primary Accession	P32189
Other Accession	Q63060, Q64516, Q0IID9, Q14409, NP_976325.1, NP_001121599.1
Reactivity	**Human**
Predicted	**Bovine, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**61245**
Antigen Region	**24-51**

GK Antibody (N-term) - Additional Information

Gene ID 2710

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

Target/Specificity
This GK antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 24-51 amino acids from the N-terminal region of human GK.

Dilution
IHC-P~~1:10~50
WB~~1:1000
E~~Use at an assay dependent concentration.

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
GK Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

GK Antibody (N-term) - Protein Information

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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

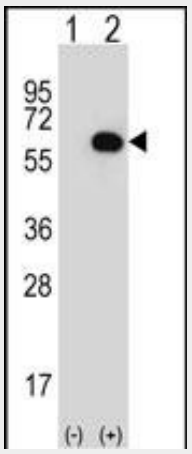
Tissue Location
[Isoform 2]: Widely expressed in fetal and adult tissues. [Isoform 4]: The sole isoform expressed in adult liver and kidney.

GK Antibody (N-term) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

GK Antibody (N-term) - Images



Western blot analysis of GK (arrow) using rabbit polyclonal GK Antibody (N-term) (Cat. #AP12927a). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the GK gene.

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GK Antibody (N-term) (Cat. #AP12927a)immunohistochemistry analysis in formalin fixed and paraffin embedded human testis tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of GK Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.

GK Antibody (N-term) - 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) - References

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