

Glycerol Kinase 1 Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP51676

Product Information

ApplicationWB, ICCPrimary AccessionP32189

Reactivity Human, Mouse, Rat

HostRabbitClonalityPolyclonalCalculated MW61245

Additional Information

Gene ID 2710

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

Dilution WB~~1:1000 ICC~~N/A

Format 0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%

Storage Store at -20 °C.Stable for 12 months from date of receipt

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.

Background

Key enzyme in the regulation of glycerol uptake and metabolism.

References

Guo W.,et al.Nat. Genet. 4:367-372(1993).
Sargent C.A.,et al.Hum. Mol. Genet. 3:1317-1324(1994).
Sargent C.A.,et al.J. Med. Genet. 37:434-441(2000).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Ross M.T.,et al.Nature 434:325-337(2005).

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