

**Anti-Glycerol kinase Picoband Antibody**  
**Catalog # ABO12997****Specification**

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**Anti-Glycerol kinase Picoband Antibody - Product Information**

Application	WB, IHC-P, E
Primary Accession	<a href="#">P32189</a>
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

**Description**

Rabbit IgG polyclonal antibody for Glycerol kinase detection. Tested with WB, IHC-P, Direct ELISA in Human;Mouse;Rat.

**Reconstitution**

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

**Anti-Glycerol kinase Picoband Antibody - Additional Information**

**Gene ID** 2710

**Other Names**

Glycerol kinase, GK, Glycerokinase, 2.7.1.30, ATP:glycerol 3-phosphotransferase, GK

**Application Details**

Western blot, 0.1-0.5 µg/ml  
Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml  
Direct ELISA, 0.1-0.5 µg/ml

**Subcellular Localization**

Mitochondrion outer membrane; In sperm and fetal tissues, the majority of the enzyme is bound to mitochondria, but in adult tissues, such as liver found in the cytoplasm.

**Tissue Specificity**

Highly expressed in the liver, kidney and testis. Isoform 2 and isoform 3 are expressed specifically in testis and fetal liver, but not in the adult liver.

**Contents**

Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg NaN<sub>3</sub>.

**Immunogen**

E. coli-derived human Glycerol kinase recombinant protein (Position: M1-S180).

**Cross Reactivity**

No cross reactivity with other proteins.

**Storage**

**At -20°C; for one year. After r°Constitution, at 4°C; for one month. It°Can also be**

**aliquotted and stored frozen at -20°C; for a longer time. Avoid repeated freezing and thawing.**

## **Anti-Glycerol kinase Picoband Antibody - 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.

## **Anti-Glycerol kinase Picoband Antibody - Protocols**

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## **Anti-Glycerol kinase Picoband Antibody - Images**

## **Anti-Glycerol kinase Picoband Antibody - Background**

Glycerol kinase is a phosphotransferase enzyme involved in triglycerides and glycerophospholipids synthesis. The protein encoded by this gene belongs to the FGGY kinase family. This protein 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. Mutations in this gene are associated with glycerol kinase deficiency (GKD). Alternatively spliced transcript variants encoding different isoforms have been found for this gene.