



# GK1/3 Polyclonal Antibody

|                           |   |
|---------------------------|---|
| <b>Catalog No</b>         | BYab-14757  |
| <b>Isotype</b>            | IgG   |
| <b>Reactivity</b>         | Human;Rat;Mouse;  |
| <b>Applications</b>       | WB;IHC;IF;ELISA   |
| <b>Gene Name</b>          | GK/GK3P   |
| <b>Protein Name</b>       | Putative glycerol kinase 3  |
| <b>Immunogen</b>          | The antiserum was produced against synthesized peptide derived from human GK3. AA range:21-70   |
| <b>Specificity</b>        | GK1/3 Polyclonal Antibody detects endogenous levels of GK1/3 protein.   |
| <b>Formulation</b>        | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.   |
| <b>Source</b>             | Polyclonal, Rabbit,IgG  |
| <b>Purification</b>       | The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.   |
| <b>Dilution</b>           | WB: 1/500 - 1/2000. IHC: 1/100 - 1/300. ELISA: 1/40000.. IF 1:50-200  |
| <b>Concentration</b>      | 1 mg/ml   |
| <b>Purity</b>             | ≥90%  |
| <b>Storage Stability</b>  | -20°C/1 year  |
| <b>Synonyms</b>           | GK; Glycerol kinase; GK; Glycerokinase; ATP:glycerol 3-phosphotransferase; GK3P; GKP3; GKTB; Putative glycerol kinase 3; GK 3; Glycerokinase 3; ATP:glycerol 3-phosphotransferase 3; Glycerol kinase; testis specific 1   |
| <b>Observed Band</b>      | 61kD  |
| <b>Cell Pathway</b>       | Mitochondrion outer membrane; Peripheral membrane protein; Cytoplasmic side. Cytoplasm. 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.  |
| <b>Tissue Specificity</b> | 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.   |
| <b>Function</b>           | catalytic activity:ATP + glycerol = ADP + sn-glycerol 3-phosphate.,caution:The sequence shown here is derived from an Ensembl automatic analysis pipeline and should be considered as preliminary data.,disease:Defects in GK are the cause of GK deficiency (GKD) [MIM:307030]. This disease can be either symptomatic with episodic metabolic and CNS decompensation or asymptomatic with hyperglycerolemia and hyperglyceroluria only.,function:Key enzyme in the regulation of glycerol uptake and metabolism.,pathway:Polyol metabolism; |

Nanjing BYabscience technology Co.,Ltd



glycerol degradation via glycerol kinase pathway; sn-glycerol 3-phosphate from glycerol: step 1/1.,similarity:Belongs to the FGGY kinase family.,subcellular location: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

**Background**

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. [provided by RefSeq, Mar 2011],

**matters needing attention**

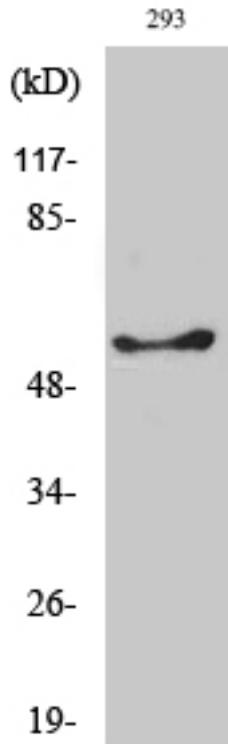
Avoid repeated freezing and thawing!

**Usage suggestions**

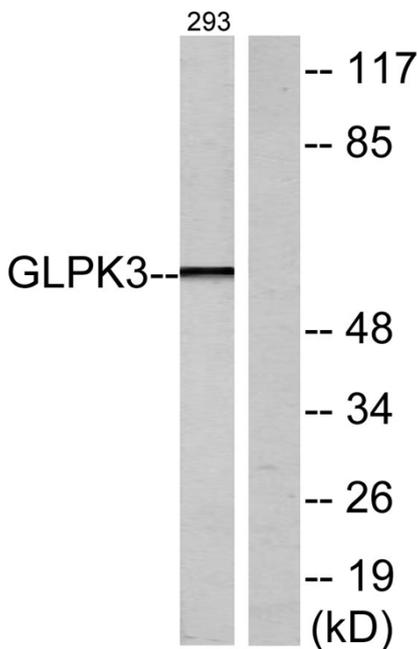
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



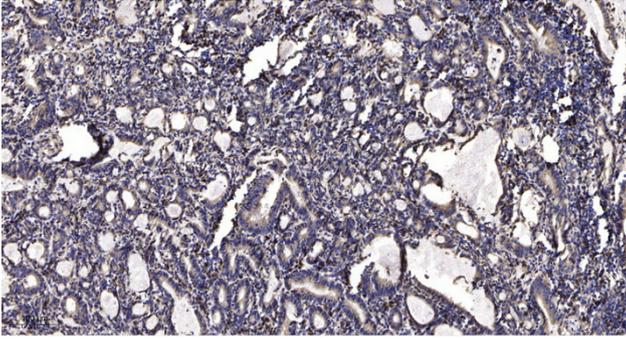
## Products Images



Western Blot analysis of various cells using GK1/3 Polyclonal Antibody



Western blot analysis of lysates from 293 cells, using GK3 Antibody. The lane on the right is blocked with the synthesized peptide.



Immunohistochemical analysis of paraffin-embedded human Gastric adenocarcinoma. 1, Antibody was diluted at 1:200(4° overnight). 2, Tris-EDTA,pH9.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 45min).