

## GK1/3 Polyclonal Antibody

<b>Catalog No :</b>	YT1911
<b>Reactivity :</b>	Human;Rat;Mouse;
<b>Applications :</b>	WB;IHC;IF;ELISA
<b>Target :</b>	GK1/3
<b>Fields :</b>	>>Glycerolipid metabolism;>>Metabolic pathways;>>PPAR signaling pathway
<b>Gene Name :</b>	GK/GK3P
<b>Protein Name :</b>	Putative glycerol kinase 3
<b>Human Gene Id :</b>	2713
<b>Human Swiss Prot No :</b>	P32189/Q14409
<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>Dilution :</b>	WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:40000.. IF 1:50-200
<b>Purification :</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Concentration :</b>	1 mg/ml
<b>Storage Stability :</b>	-15°C to -25°C/1 year(Do not lower than -25°C)
<b>Observed Band :</b>	61kD

**Cell Pathway :** Glycerolipid metabolism;PPAR;

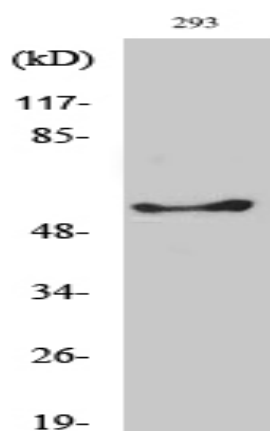
**Background :** The protein encoded by this gene belongs to the FGGY kinase family. This protein is a key enzyme in the regulation of glycerol uptake and metabolism. It catalyzes the phosphorylation of glycerol by ATP, yielding ADP and glycerol-3-phosphate. Mutations in this gene are associated with glycerol kinase deficiency (GKD). Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Mar 2011],

**Function :** 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; 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

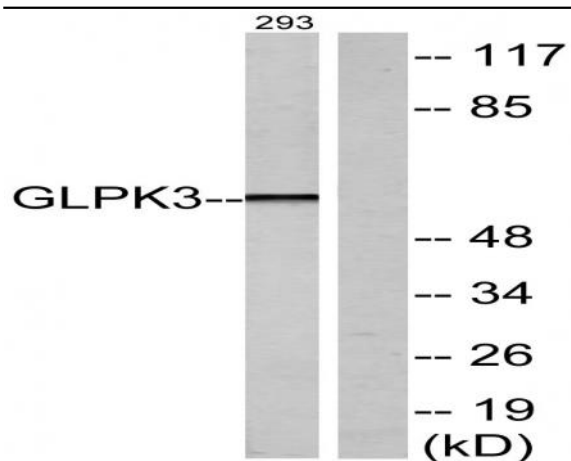
**Subcellular Location :** Mitochondrion outer membrane; Peripheral membrane protein; Cytoplasmic side. Cytoplasm. In sperm and fetal tissues, the majority of the enzyme is bound to mitochondria, but in adult tissues, such as liver found in the cytoplasm.

**Expression :** 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.

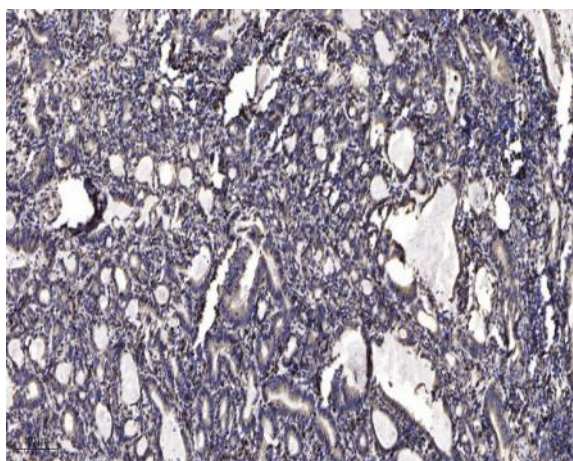
## Products Images



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).