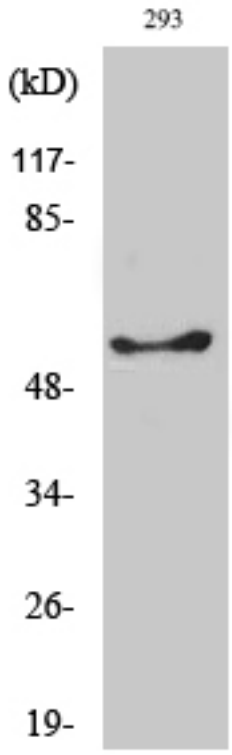
GK1/3 Polyclonal Antibody

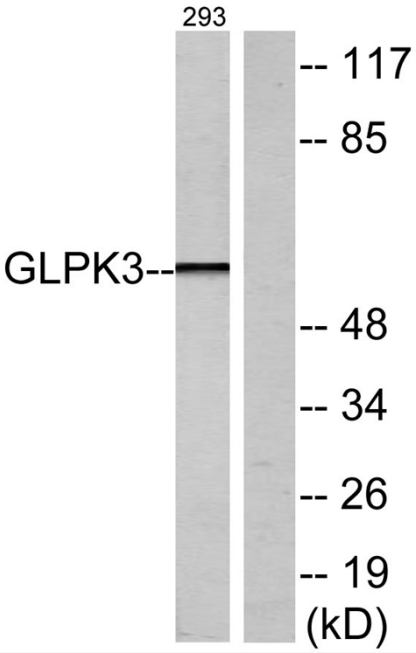
Catalog No	YP-Ab-14757
Isotype	IgG
Reactivity	Human;Rat;Mouse;
Applications	WB;IHC;IF;ELISA
Gene Name	GK/GK3P
Protein Name	Putative glycerol kinase 3
Immunogen	The antiserum was produced against synthesized peptide derived from human GK3. AA range:21-70
Specificity	GK1/3 Polyclonal Antibody detects endogenous levels of GK1/3 protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB: 1/500 - 1/2000. IHC: 1/100 - 1/300. ELISA: 1/40000.. IF 1:50-200
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	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
Observed Band	61kD
Cell Pathway	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.
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.
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
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.

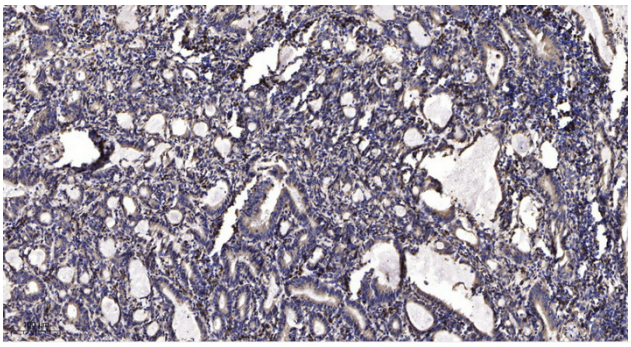
Products Images



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).