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Anti-Glycerol Kinase 1 Antibody

Catalog # AP51676

Product Information

Application	WB, IHC, IF/IC
Primary Accession	P32189
Reactivity	Human, Mouse, Rat, Pig, Bovine, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	61245

Additional Information

Gene ID	2710
Other Names	Glycerol kinase; GK; Glycerokinase; ATP:glycerol 3-phosphotransferase
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human Glycerol Kinase 1. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000) IHC~~1:100~500 IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

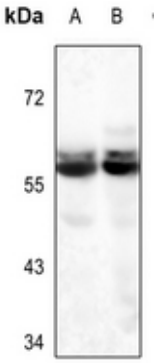
Protein Information

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.

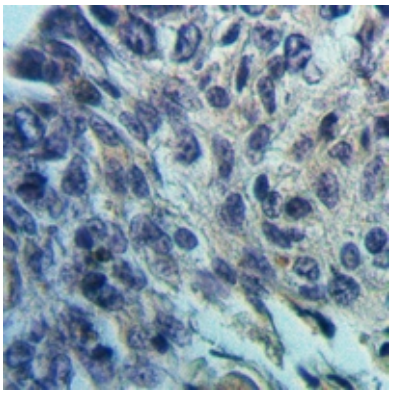
References

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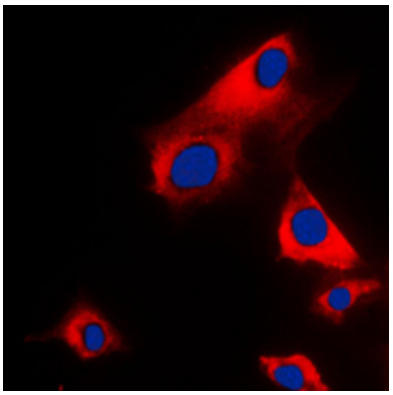
Images



Western blot analysis of Glycerol Kinase 1 expression in mouse liver (A), rat liver (B) whole cell lysates. (Predicted band size: 61 kD; Observed band size: 57 kD)



Immunohistochemical analysis of Glycerol Kinase 1 staining in human lung cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of Glycerol Kinase 1 staining in H9C2 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a DyLight 594-conjugated secondary antibody (red) in PBS at room temperature in the dark. DAPI was used to stain the cell nuclei (blue).

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