

For Research Use Only

GCK Monoclonal antibody

Catalog Number: 67216-1-Ig **1 Publications**



Basic Information

Catalog Number: 67216-1-Ig	GenBank Accession Number: BC001890	Purification Method: Protein G purification
Size: 150ul, Concentration: 1600 ug/ml by Nanodrop and 1000 ug/ml by Bradford method using BSA as the standard;	GeneID (NCBI): 2645	CloneNo.: 1C3A3
Source: Mouse	UNIPROT ID: P35557	Recommended Dilutions: WB 1:5000-1:20000 IHC 1:300-1:1000 IF-P 1:200-1:800
Isotype: IgG1	Full Name: glucokinase (hexokinase 4)	
Immunogen Catalog Number: AG8116	Calculated MW: 52 kDa	
	Observed MW: 52 kDa	

Applications

Tested Applications: WB, IHC, IF-P, ELISA	Positive Controls: WB : pig liver tissue, SMMC-7721 cells, rat liver tissue, HSC-T6 cells, L02 cells, HepG2 cells, mouse liver tissue IHC : human liver cancer tissue, IF-P : human liver cancer tissue,
Cited Applications: WB	
Species Specificity: human, mouse, rat, pig	
Cited Species: human, mouse	
Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0	

Background Information

Glucokinase (GCK) is a structurally and functionally unique member of hexokinase family. It is expressed only in mammalian liver and pancreatic islet beta cells. Because of its unique functional characteristics, the enzyme plays an important regulatory role in glucose metabolism. The rate of glucose metabolism in liver and pancreas is a function of the activity of the enzyme (PMID:1740341). Moreover, GCK has been found to have relationship with diabetes. Defects in GCK are the cause of maturity-onset diabetes of the young type 2 (MODY2) and familial hyperinsulinemic hypoglycemia type 3 (HHF3). It has 3 isoforms produced by alternative splicing with the same molecular mass of 52 kDa.

Notable Publications

Author	Pubmed ID	Journal	Application
Sa Yang	35873595	Front Pharmacol	WB

Storage

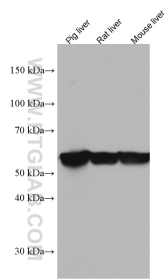
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

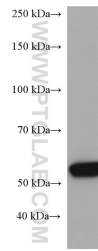
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

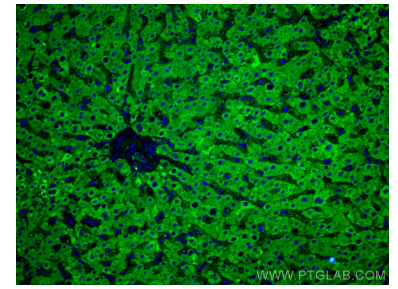
Selected Validation Data



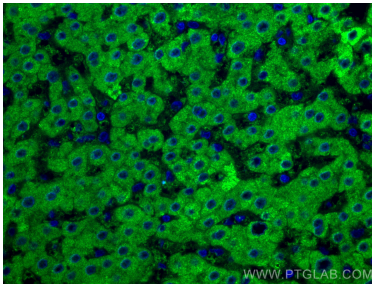
pig liver tissue were subjected to SDS PAGE followed by western blot with 67216-1-Ig (GCK antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



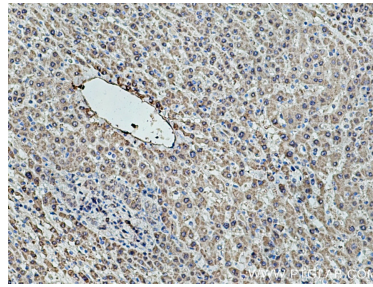
pig liver tissue were subjected to SDS PAGE followed by western blot with 67216-1-Ig (GCK antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



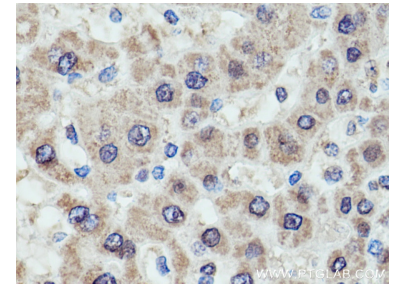
Immunofluorescent analysis of (4% PFA) fixed human liver cancer tissue using GCK antibody (67216-1-Ig, Clone: 1C3A3) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



Immunofluorescent analysis of (4% PFA) fixed human liver cancer tissue using GCK antibody (67216-1-Ig, Clone: 1C3A3) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 67216-1-Ig (GCK antibody) at dilution of 1:600 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 67216-1-Ig (GCK antibody) at dilution of 1:600 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).