

For Research Use Only

# GCK Polyclonal antibody

Catalog Number: 19666-1-AP

Featured Product

20 Publications



## Basic Information

### Catalog Number:

19666-1-AP

### Size:

260 µg/ml

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG8116

### GenBank Accession Number:

BC001890

### GeneID (NCBI):

2645

### UNIPROT ID:

P35557

### Full Name:

glucokinase (hexokinase 4)

### Calculated MW:

52 kDa

### Observed MW:

52 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:1000-1:4000

IP 0.5-4.0 µg for 1.0-3.0 mg of total protein lysate

IHC 1:100-1:400

## Applications

### Tested Applications:

IHC, IP, WB, ELISA

### Cited Applications:

WB, IF, FC, IHC

### Species Specificity:

mouse, rat, human

### Cited Species:

rat, mouse

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

### Positive Controls:

WB : mouse liver tissue, rat liver tissue

IP : mouse liver tissue,

IHC : human liver tissue,

## 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
Xiaojie Bai	34496251	Cell Rep	
Jin Wu	34687945	J Genet Genomics	WB
Cheng Liu	25397718	J Agric Food Chem	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

For technical support and original validation data for this product please contact:

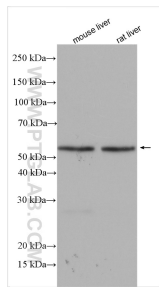
T: 4006900926

E: Proteintech-CN@ptglab.com

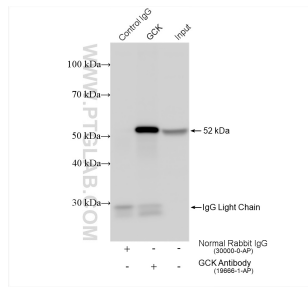
W: ptgcn.com

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

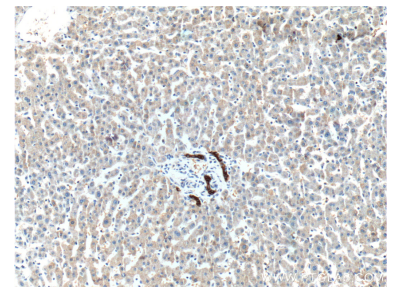
## Selected Validation Data



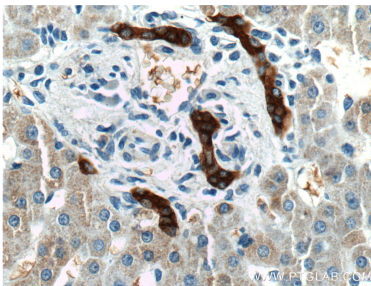
Various lysates were subjected to SDS PAGE followed by western blot with 19666-1-AP (GCK antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



IP result of anti-GCK (IP:19666-1-AP, 4ug; Detection:19666-1-AP 1:4000) with mouse liver tissue lysate 1840 ug.



Immunohistochemical analysis of paraffin-embedded human liver tissue slide using 19666-1-AP (GCK Antibody) at dilution of 1:200 (under 10x lens).



Immunohistochemical analysis of paraffin-embedded human liver tissue slide using 19666-1-AP (GCK Antibody) at dilution of 1:200 (under 40x lens).