For Research Use Only

GCK Monoclonal antibody

Catalog Number:67216-1-lg 1 Publications



Basic Information

Catalog Number: 67216-1-lg

Size: 1600 µg/ml Source: Mouse Isotype: lgG1

Immunogen Catalog Number:

AG8116

glucokinase (hexokinase 4) Calculated MW:

52 kDa

GenBank Accession Number:

BC001890

2645

P35557

GeneID (NCBI):

UNIPROT ID:

Full Name:

Observed MW:

52 kDa

Applications

Tested Applications: IF-P, IHC, WB, ELISA **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

Positive Controls:

WB: pig liver tissue, SMMC-7721 cells, rat liver tissue, HSC-T6 cells, LO2 cells, HepG2 cells, mouse liver tissue

Purification Method:

Protein G purification

Recommended Dilutions:

WB 1:5000-1:20000 IHC 1:300-1:1000

IF 1:200-1:800

CloneNo.:

1C3A3

IHC: human liver cancer tissue, IF: human liver cancer 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
Sa Yang	35873595	Front Pharmacol	WB

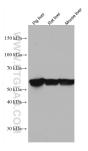
Storage

Storage: Store at -20°C. Storage Buffer:

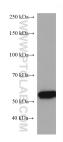
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

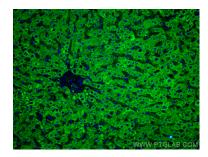
Selected Validation Data



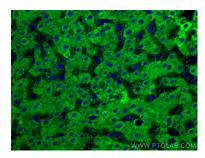
pig liver tissue were subjected to SDS PAGE followed by western blot with 67216-1-lg (GCK antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



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



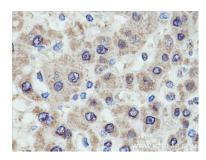
Immunofluorescent analysis of (4% PFA) fixed human liver cancer tissue using GCK antibody (67216-1-Ig, Clone: 1C3A3) at dilution of 1:400 and CoraLite®488-Conjugated Affini Pure Goat Anti-Mouse IgG(H+L).



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 Affini Pure Goat Anti-Mouse IgG(H+L).



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