Datasheet for ABIN392390

anti-GCK antibody (N-Term)

3 Images

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Overview

Quantity:	200 µL
Target:	GCK
Binding Specificity:	AA 1-30, N-Term
Reactivity:	Human, Mouse
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This GCK antibody is un-conjugated
Application:	Western Blotting (WB), Immunofluorescence (IF), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p))

Product Details

Immunogen:	This GCK antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human GCK.
Clone:	RB05442
Isotype:	IgG
Purification:	This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Target Details

Target:	GCK
Alternative Name:	GCK (GCK Products)

Target Details

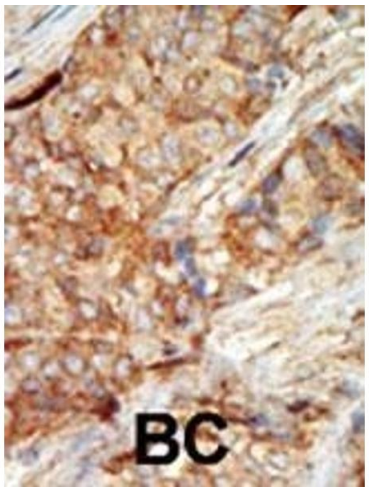
Background:	Hexokinases phosphorylate glucose to produce glucose-6-phosphate, thus committing glucose to the glycolytic pathway. Alternative splicing of the gene for GCK results in three tissue-specific forms of glucokinase, one found in pancreatic islet beta cells and two found in liver. The protein localizes to the outer membrane of mitochondria. In contrast to other forms of hexokinase, this enzyme is not inhibited by its product glucose-6-phosphate but remains active while glucose is abundant. Mutations in the gene have been associated with non-insulin dependent diabetes mellitus (NIDDM), also called maturity onset diabetes of the young, type 2 (MODY2), mutations have also been associated with persistent hyperinsulinemic hypoglycemia of infancy (PHHI).
Molecular Weight:	52191
Gene ID:	2645
NCBI Accession:	NP_000153, NP_277042, NP_277043
UniProt:	P35557
Pathways:	MAPK Signaling, Positive Regulation of Peptide Hormone Secretion, Carbohydrate Homeostasis , Cellular Glucan Metabolic Process, Regulation of Carbohydrate Metabolic Process

Application Details

Application Notes:	IF: 1:10~50. WB: 1:1000. IHC-P: 1:50~100
Restrictions:	For Research Use only

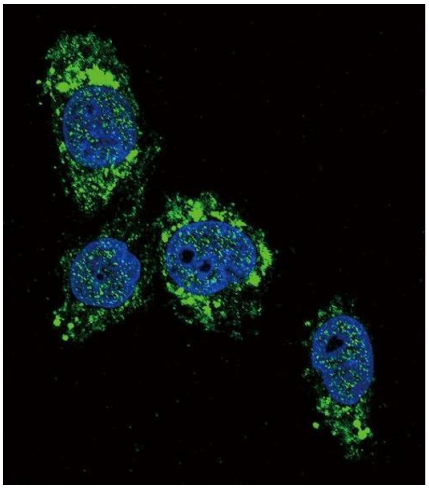
Handling

Format:	Liquid
Buffer:	Purified polyclonal antibody supplied in PBS with 0.09 % (W/V) sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Handling Advice:	Avoid freeze-thaw cycles.
Storage:	4 °C,-20 °C
Storage Comment:	Maintain refrigerated at 2-8 °C for up to 6 months. For long term storage store at -20 °C in small aliquots.
Expiry Date:	6 months



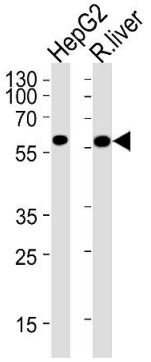
Immunohistochemistry (Paraffin-embedded Sections)

Image 1. Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by AEC staining. This data demonstrates the use of this antibody for immunohistochemistry, clinical relevance has not been evaluated. BC = breast carcinoma, HC = hepatocarcinoma.



Immunofluorescence

Image 2. Confocal immunofluorescent analysis of GCK Antibody (N-term) (ABIN392390 and ABIN2842018) with HepG2 cell followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG (green). DI was used to stain the cell nuclear (blue).



Western Blotting

Image 3. GCK Antibody (M1) (ABIN392390 and ABIN2842018) western blot analysis in HepG2 cell line and rat liver lysates (35 µg/lane).This demonstrates the GCK antibody detected the GCK protein (arrow).