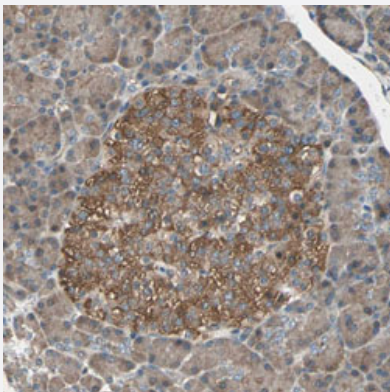


GCK polyclonal antibody

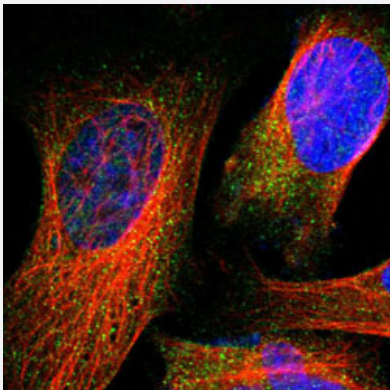
Catalog # PAB30772 Size 100 uL

Applications



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunohistochemical staining (Formalin-fixed paraffin-embedded sections) of human pancreas with GCK polyclonal antibody (Cat # PAB30772) shows moderate cytoplasmic positivity in islet cells.



Immunofluorescence

Immunofluorescent staining of U-2 OS with GCK polyclonal antibody (Cat # PAB30772) (Green) shows positivity in cytoplasm.

Specification

Product Description	Rabbit polyclonal antibody raised against partial recombinant human GCK.
Immunogen	Recombinant protein corresponding to human GCK.
Sequence	RLVDENLLFHGEASEQLRTRGAFETRFVSQVESDTGDRKQIYNILSTLGLRPSTTDCDIVRRACES VSTRAAHMCSAGLAGVINRMRESRSEDVMRITVGVDGSVYKLHPSFKERFHA
Host	Rabbit
Reactivity	Human

Form	Liquid
Purification	Antigen affinity purification
Isotype	IgG
Recommend Usage	Immunofluorescence (1-4 ug/mL) Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) (1:50-1:200) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS, pH 7.2 (40% glycerol, 0.02% sodium azide).
Storage Instruction	Store at 4°C. For long term storage store at -20°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Applications

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Gene Info — GCK

Entrez GeneID	2645
Protein Accession#	P35557
Gene Name	GCK
Gene Alias	GK, GLK, HHF3, HK4, HKIV, HXKP, MODY2
Gene Description	glucokinase (hexokinase 4)
Omim ID	125851 125853 138079 602485 606176
Gene Ontology	Hyperlink

Gene Summary

Hexokinases phosphorylate glucose to produce glucose-6-phosphate, the first step in most glucose metabolism pathways. Alternative splicing of this gene 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 this gene have been associated with non-insulin dependent diabetes mellitus (NIDDM), maturity onset diabetes of the young, type 2 (MODY2) and persistent hyperinsulinemic hypoglycemia of infancy (PHHI). [provided by RefSeq]

Other Designations

ATP:D-hexose 6-phosphotransferase|OTTHUMP00000024521|OTTHUMP00000159308|glucokinase|hexokinase D, pancreatic isozyme

Pathway

- [Amino sugar and nucleotide sugar metabolism](#)
- [Galactose metabolism](#)
- [Glycolysis / Gluconeogenesis](#)
- [Insulin signaling pathway](#)
- [Maturity onset diabetes of the young](#)
- [Metabolic pathways](#)
- [Starch and sucrose metabolism](#)
- [Streptomycin biosynthesis](#)
- [Type II diabetes mellitus](#)

Disease

- [Alzheimer disease](#)
- [Atherosclerosis](#)
- [Birth Weight](#)
- [Calcinosis](#)
- [Cardiovascular Diseases](#)
- [Coronary Artery Disease](#)
- [Coronary Disease](#)

- [Diabetes](#)
- [Diabetes Complications](#)
- [Diabetes Mellitus](#)
- [Diabetic Nephropathies](#)
- [Disease Progression](#)
- [Disease Susceptibility](#)
- [Edema](#)
- [Fetal Growth Retardation](#)
- [Genetic Predisposition to Disease](#)
- [Glucose Intolerance](#)
- [HIV Infections](#)
- [Hyperglycemia](#)
- [Hyperinsulinism](#)
- [Hypertension](#)
- [Hypoglycemia](#)
- [Insulin Resistance](#)
- [Kidney Failure](#)
- [Metabolic Syndrome X](#)
- [Neoplasms](#)
- [Obesity](#)
- [Osteoporosis](#)
- [Overweight](#)
- [Persistent Hyperinsulinemia Hypoglycemia of Infancy](#)
- [Postoperative Complications](#)
- [Pregnancy Complications](#)

- [Pregnancy in Diabetics](#)
- [Sudden Infant Death](#)