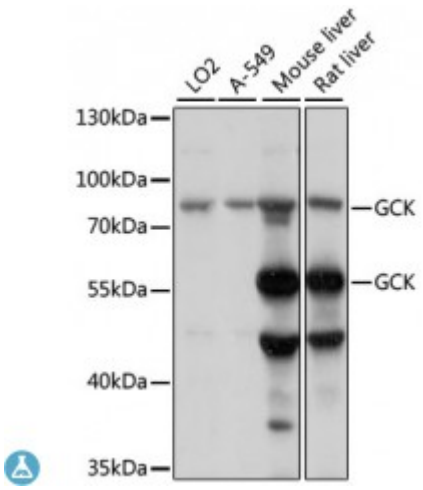
Anti-GCK Antibody



Description	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).
Model	STJ117253
Host	Rabbit
Reactivity	Human, Mouse, Rat
Applications	WB
Immunogen	Recombinant fusion protein containing a sequence corresponding to amino acids 250-465 of human GCK (NP_000153.1).
Gene ID	2645
Gene Symbol	GCK
Dilution range	WB 1:500 - 1:2000
Tissue Specificity	Isoform 1 is expressed in pancreas, Isoform 2 and isoform 3 is expressed in liver
Purification	Affinity purification
Note	For Research Use Only (RUO).

Protein Name	Glucokinase
Molecular Weight	52.191 kDa
Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	PBS with 0.02% sodium azide, 50% glycerol, pH7.3.
Storage Instruction	Store at -20C. Avoid freeze / thaw cycles.
Database Links	HGNC:4195OMIM:125851Reactome:R-HSA-170822
Alternative Names	Glucokinase
Function	Catalyzes the initial step in utilization of glucose by the beta-cell and liver at physiological glucose concentration, Glucokinase has a high Km for glucose, and so it is effective only when glucose is abundant, The role of GCK is to provide G6P for the synthesis of glycogen, Pancreatic glucokinase plays an important role in modulating insulin secretion, Hepatic glucokinase helps to facilitate the uptake and conversion of glucose by acting as an insulin-sensitive determinant of hepatic glucose usage,
Cellular Localization	Cytoplasm

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