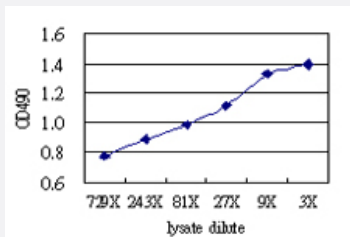


GCK (Human) Matched Antibody Pair

Catalog # H00002645-AP52 Size 1 Set

Applications



Sandwich ELISA detection sensitivity ranging from approximately 729x to 3x dilution of the GCK 293T overexpression lysate (non-denatured).

Specification

Product Description	This antibody pair set comes with a matched antibody pair to detect and quantify the protein level of human GCK.
Reactivity	Human
Interspecies Antigen Sequence	Mouse (95%); Rat (94%)
Quality Control Testing	Standard curve using GCK 293T overexpression lysate (non-denatured) as an analyte. Sandwich ELISA detection sensitivity ranging from approximately 729x to 3x dilution of the GCK 293 T overexpression lysate (non-denatured).
Supplied Product	Antibody pair set content: 1. Capture antibody: mouse monoclonal anti-GCK, IgG1 Kappa (100 ug) 2. Detection antibody: rabbit purified polyclonal anti-GCK (50 ug) *Reagents are sufficient for at least 3-5 x 96 well plates using recommended protocols.
Storage Instruction	Store reagents of the antibody pair set at -20°C or lower. Please aliquot to avoid repeated freeze thaw cycle. Reagents should be returned to -20°C storage immediately after use.

Applications

- ELISA Pair (Transfected lysate)

[Protocol Download](#)

Gene Info — GCK

Entrez GeneID [2645](#)

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](#)