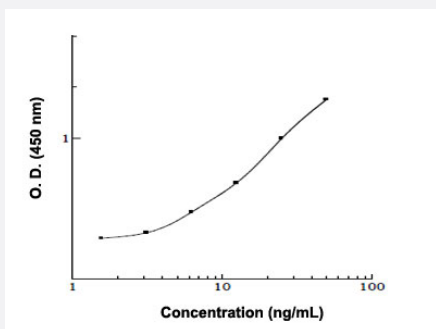


GCK (Human) ELISA Kit

Catalog # KA2109 Size 1 Kit

Applications



The standard curve is for the purpose of illustration only and should not be used to calculate unknowns. A standard curve should be generated each time the assay is performed.

Specification

Product Description	GCK (Human) ELISA Kit is a sandwich enzyme immunoassay for the quantitative measurement of human GCK.
Suitable Sample	Cell Culture Samples, Plasma, Serum
Sample Volume	50 μ L
Label	Peroxidase-conjugated
Detection Method	Colorimetric
Assay Type	Quantitative
Calibration Range	1.563 to 50 ng/mL
Reactivity	Dog, Human
Regulation Status	For research use only (RUO)
Quality Control Testing	Standard Curve The standard curve is for the purpose of illustration only and should not be used to calculate unknowns. A standard curve should be generated each time the assay is performed.
Storage Instruction	Store components of the kit at 4°C or -20°C as described in the protocol.

Applications

- Quantification

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](#)