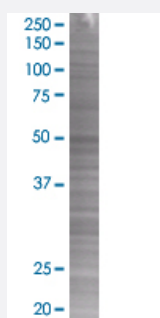


GCK 293T Cell Transient Overexpression Lysate(Denatured)

Catalog # H00002645-T01

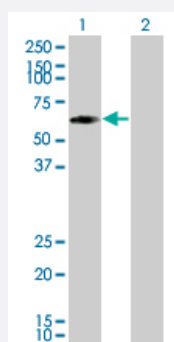
Size 100 uL

Applications



SDS-PAGE Gel

GCK transfected lysate



Western Blot

Lane 1: GCK transfected lysate (52.2 KDa).

Lane 2: Non-transfected lysate.

Specification

Transfected Cell Line 293T

Plasmid pCMV-GCK full-length

Host Human

Theoretical MW (kDa) 52.2

Interspecies Antigen Sequence Rat (95)

Quality Control Testing

Transient overexpression cell lysate was tested with Anti-GCK antibody ([H00002645-B01](#)) by Western Blots.
 SDS-PAGE Gel
 GCK transfected lysate
 Western Blot
 Lane 1: GCK transfected lysate (52.2 KDa).
 Lane 2: Non-transfected lysate.

Storage Buffer

1X Sample Buffer (50 mM Tris-HCl, 2% SDS, 10% glycerol, 300 mM 2-mercaptoethanol, 0.01% Bromophenol blue)

Storage Instruction

Store at -80°C. Aliquot to avoid repeated freezing and thawing.

Applications

- Western Blot

Gene Info — GCK

Entrez GeneID

[2645](#)

GeneBank Accession#

[NM_000162](#)

Protein Accession#

[NP_000153](#)

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](#)