

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

Product datasheet for TA500459

Glucokinase (GCK) Mouse Monoclonal Antibody [Clone ID: OTI3E3]

Product data:

Product Type: Primary Antibodies

Clone Name: OTI3E3

Applications: IF, IHC, WB

Recommend Dilution: WB 1:500, IHC 1:50, IF 1:50

Reactivity: Human
Host: Mouse
Isotype: IgG1

Clonality: Monoclonal

Immunogen: Full length human recombinant protein of human GCK (NP_000153) produced in HEK293T

cell.

Formulation: PBS (pH 7.3) containing 1% BSA, 50% glycerol and 0.02% sodium azide.

Concentration: 1 mg/ml

Purification: Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography

(protein A/G)

Predicted Protein Size: 52 kDa

Gene Name: glucokinase

Database Link: NP 000153 Entrez Gene 2645 Human

Background: 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]

Synonyms: FGQTL3; GK; GLK; HHF3; HK4; HKIV; HXKP; LGLK; MODY2

Protein Families: Druggable Genome

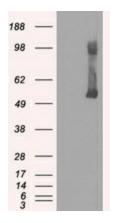




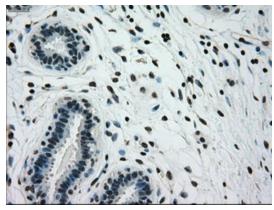
Protein Pathways:

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, Type II diabetes mellitus

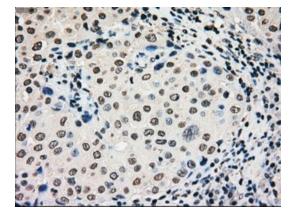
Product images:



HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY GCK ([RC200472], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-GCK. Positive lysates [LY400059] (100ug) and [LC400059] (20ug) can be purchased separately from OriGene.

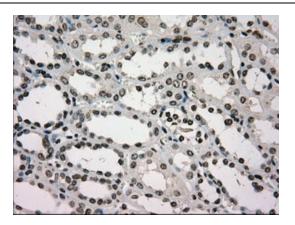


Immunohistochemical staining of paraffinembedded Human breast tissue within the normal limits using anti-GCK mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, TA500459)

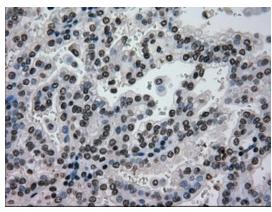


Immunohistochemical staining of paraffinembedded Adenocarcinoma of Human breast tissue using anti-GCK mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, TA500459)

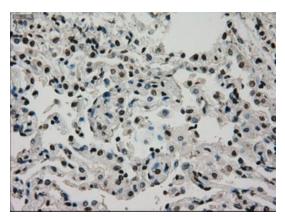




Immunohistochemical staining of paraffinembedded Human Kidney tissue within the normal limits using anti-GCK mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, TA500459)

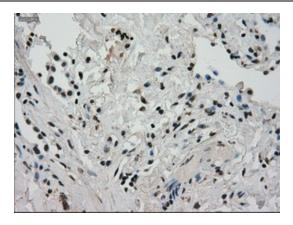


Immunohistochemical staining of paraffinembedded Carcinoma of Human kidney tissue using anti-GCK mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, TA500459)

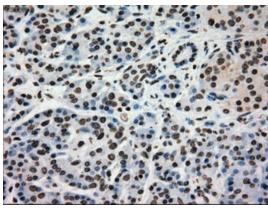


Immunohistochemical staining of paraffinembedded Human lung tissue within the normal limits using anti-GCK mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, TA500459)

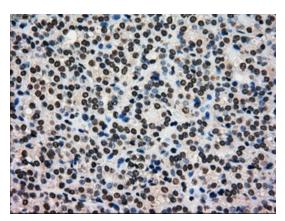




Immunohistochemical staining of paraffinembedded Carcinoma of Human lung tissue using anti-GCK mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, TA500459)

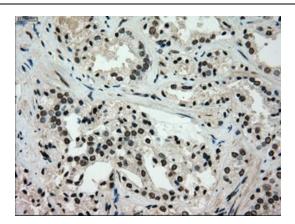


Immunohistochemical staining of paraffinembedded Human pancreas tissue within the normal limits using anti-GCK mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, TA500459)

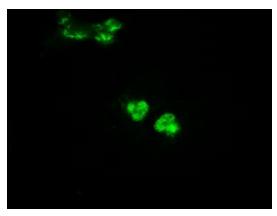


Immunohistochemical staining of paraffinembedded Carcinoma of Human thyroid tissue using anti-GCK mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, TA500459)





Immunohistochemical staining of paraffinembedded Carcinoma of Human prostate tissue using anti-GCK mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, TA500459)



Anti-GCK mouse monoclonal antibody (TA500459) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY GCK ([RC200472]).