



Anti-GCK monoclonal antibody, clone 4F4 (DCABH-542)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

| | |
|----------------------------|--|
| Product Overview | Mouse monoclonal to GLK |
| Antigen Description | 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. |
| Immunogen | Protein expressed in 293T cells transfected with Human GLK (NM_000162) expression vector |
| Isotype | IgG1 |
| Source/Host | Mouse |
| Species Reactivity | Human |
| Clone | 4F4 |
| Purification | Purified from mouse ascite fluid by affinity chromatography |
| Conjugate | Unconjugated |
| Applications | WB, IHC-P, Flow Cyt, ICC/IF |
| Positive Control | HEK293T transfected lysate COS7 transfected cells Human breast, breast carcinoma, kidney, kidney carcinoma, lung, lung carcinoma, pancreas, thyroid carcinoma or prostate carcinoma tissue. |
| Format | Liquid |

| | |
|---------------------|---|
| Size | 100 µl |
| Buffer | pH: 7.30; Preservative: 0.02% Sodium azide; Constituents: 1% BSA, 50% Glycerol, 48% PBS |
| Preservative | 0.02% Sodium Azide |
| Storage | Store at -20°C. Stable for 12 months at -20°C |

GENE INFORMATION

| | |
|----------------------------|--|
| Gene Name | GCK glucokinase (hexokinase 4) [Homo sapiens] |
| Official Symbol | GCK |
| Synonyms | GCK; glucokinase (hexokinase 4); maturity onset diabetes of the young 2 , MODY2; glucokinase; HK4; HK IV; hexokinase-4; hexokinase-D; hexokinase type IV; hexokinase D, pancreatic isozyme; ATP:D-hexose 6-phosphotransferase; GK; GLK; HHF3; HKIV; HXKP; LGLK; |
| Entrez Gene ID | 2645 |
| Protein Refseq | NP_000153 |
| UniProt ID | P35557 |
| Chromosome Location | 7p15.3-p15.1 |
| Pathway | Amino sugar and nucleotide sugar metabolism, organism-specific biosystem; Amino sugar and nucleotide sugar metabolism, conserved biosystem; Butirosin and neomycin biosynthesis, organism-specific biosystem; Butirosin and neomycin biosynthesis, conserved biosystem; Developmental Biology, organism-specific biosystem; FOXA2 and FOXA3 transcription factor networks, organism-specific biosystem; GDP-glucose biosynthesis, organism-specific biosystem. |
| Function | ATP binding; glucokinase activity; glucose binding; kinase activity; nucleotide binding; protein binding; transferase activity; |