Recombinant Human Glucokinase (Hexokinase 4), GST-tagged, Active

Cat. No. GCK-323H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant human Full-length GCK was expressed by baculovirus in*Sf9 cell*susing an N-terminal GST tag. MW=125kDa.
Species	Human
Source	Sf9 Cells
Description	GCK is a serine/threonine protein kinase that is activated by TNFα and interacts with the TNF receptor-associated factor 2 (TRAF2). GCK is upstream of MAP kinases and particularly activates the SAPK pathway. Although GCK is found in many tissues, its expression in lymphoid follicles is restricted to the cells of germinal centre, where it may participate in B-cell differentiation. A mouse protein Rab8ip that has high homology to GCK can interact with the vesicular transport protein Rab8. Based on its interaction with Rab8, it is postulated that Rab8ip/GCK may modulate secretion in response to stress stimuli.
Sequence	Full-length.
Applications	Kinase Assay, Western Blot.
Storage And Stability	Store product at –70°C. For optimal storage, aliquot target into smaller quantities after centrifugation and store at recommended temperature. For most favorable performance, avoid repeated handling and multiple freeze/thaw cycles.

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GENE INFORMATION

Gene Name	GCK glucokinase (hexokinase 4) [Homo sapiens]
Synonyms	GCK; glucokinase (hexokinase 4); GK; GLK; HK4; HHF3; HKIV; HXKP; MODY2; Hexokinase type IV; HK IV; Hexokinase-D; EC 2.7.1.2; Hexokinase-4; OTTHUMP00000024521; OTTHUMP00000159308; D-hexose 6-phosphotransferase; Hexokinase type IV; hexokinase D, pancreatic isozyme; maturity onset diabetes of the young 2
Gene ID	2645
mRNA Refseq	NM_000162
Protein Refseq	NP_000153
UniProt ID	P35557
Chromosome Location	7p15.3-p15.1
MIM	138079
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; Diabetes pathways; Integration of energy metabolism; Integration of energy metabolism; Metabolism of carbohydrates; Regulation of beta-cell development
Function	ATP binding; glucokinase activity; glucose binding; kinase activity; nucleotide binding;

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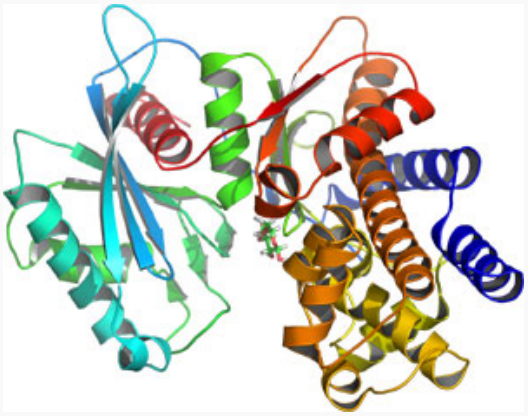
	protein binding; transferase activity
Based on PDB entry 1GLK	

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