

### Product datasheet for AR09038PU-L

#### OriGene Technologies, Inc.

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## Glucokinase / Hexokinase-4 (His-tag) Human Protein

**Product data:** 

**Product Type: Recombinant Proteins** 

**Description:** Glucokinase / Hexokinase-4 (His-tag) human recombinant protein, 0.5 mg

Species: Human E. coli **Expression Host:** 

**Expression cDNA Clone** 

or AA Sequence:

MDRGLRLETH EEASVKMLPT YVRSTPEGSE VGDFLSLDLG GTNFRVMLVK VGEGEEGQWS VKTKHQMYSI PEDAMTGTAE MLFDYISECI SDFLDKHQMK HKKLPLGFTF SFPVRHEDID KGILLNWTKG FKASGAEGNN VVGLLRDAIK RRGDFEMDVV AMVNDTVATM ISCYYEDHQC EVGMIVGTGC NACYMEEMQN VELVEGDEGR MCVNTEWGAF GDSGELDEFL LEYDRLVDES SANPGQQLYE KLIGGKYMGE LVRLVLLRLV DENLLFHGEA SEQLRTRGAF ETRFVSQVES DTGDRKQIYN ILSTLGLRPS TTDCDIVRRA CESVSTRAAH MCSAGLAGVI NRMRESRSED

MGSSHHHHHH SSGLVPRGSH MLDDRARMEA AKKEKVEQIL AEFQLQEEDL KKVMRRMQKE

VMRITVGVDG SVYKLHPSFK ERFHASVRRL TPSCEITFIE SEEGSGRGAA LVSAVACKKA CMLGQ

Tag: His-tag Predicted MW: 54.3 kDa Concentration: lot specific

**Purity:** >95% >/= 95% by SDS PAGE **Buffer:** Presentation State: Purified

State: Liquid purified protein

Buffer System: 20 mM Tris-HCl pH 8.0, 10% glycerol

Preparation: Liquid purified protein

**Protein Description:** Recombinant human Hexokinase 4, fused to His-tag at N-terminus, was expressed in E.coli

and purified by using conventional chromatography techniques.

Store (in aliquots) at -20°C. Avoid repeated freezing and thawing. Storage:

Stability: Shelf life: one year from despatch.

RefSeq: NP 000153

Locus ID: 2645

**UniProt ID:** P35557, Q53Y25

Cytogenetics: 7p13



#### Glucokinase / Hexokinase-4 (His-tag) Human Protein - AR09038PU-L

Synonyms: FGQTL3; GK; GLK; HHF3; HK4; HKIV; HXKP; LGLK; MODY2; PNDM1

**Summary:** This gene encodes a member of the hexokinase family of proteins. Hexokinases

phosphorylate glucose to produce glucose-6-phosphate, the first step in most glucose metabolism pathways. 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. The use of multiple promoters and alternative splicing of this gene result in distinct protein isoforms that exhibit tissue-specific expression in the pancreas and liver. In the pancreas, this enzyme plays a role in glucose-stimulated insulin secretion, while in the liver, this enzyme is important in glucose uptake and conversion to glycogen. Mutations in this gene that alter enzyme activity have been associated with multiple types of diabetes and hyperinsulinemic hypoglycemia. [provided by RefSeq, Aug 2017]

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:**

