

## Product datasheet

# Recombinant Human Glucokinase protein ab73514

### 概述

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产品名称	重组人Glucokinase蛋白
蛋白长度	Full length protein

### 描述

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性质	Recombinant
来源	Escherichia coli

### 氨基酸序列

Accession [P35557](#)

种属 Human

序列 **MGSSHHHHHH SSGLVPRGSH MLDDRARMEA**  
 AKKEKVEQIL AEFQLQEEDL KKVRRMQKE  
 MDRGLRLETH EEASVKMLPT YVRSTPEGSE  
 VGDFLSLDLG GTNFRVMLVK VGEGEEGQWS  
 VKTKHQMYSI PEDAMTGTAE MLFDYISECI  
 SDFLDKHQMK HKKLPLGFTF SFPVRHEDID  
 KGILLNWTKG FKASGAEGNN VVGLLRDAIK  
 RRGDFEMDVV AMVNDTVATM ISCYEDHQC  
 EVGMIVGTGC NACYMEEMQN VELVEGDEGR  
 MCVNTEWGAF GDSGELDEFL LEYDRLVDES  
 SANPGQQLYE KLIGGKYMGE LVRLVLLRLV  
 DENLLFHGEA SEQLRTRGAF ETRFVSQVES  
 DTGDRKQIYN ILSTLGLRPS TTDCDIVRRA  
 CESVSTRAAH MCSAGLAGVI NRMRESRSED  
 VMRITVGVDG SVYKLHPSFK ERFHASVRRLL  
 TPSCEITFIE SEEGSGRGAA LVSAVACKKA CMLGQ.

分子量	54 kDa
氨基酸	1 to 465
标签	His tag N-Terminus

### 技术指标

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Our [Abpromise guarantee](#) covers the use of **ab73514** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

<b>应用</b>	SDS-PAGE
<b>纯度</b>	> 95 % SDS-PAGE. ab73514 was purified by proprietary chromatographic techniques. Purity: Greater than 95.0% as determined by: (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE.
<b>形式</b>	Liquid
<b>补充说明</b>	For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

## 制备和贮存

<b>稳定性和存储</b>	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles. Preservative: None Constituents: 10% Glycerol, 20mM Tris, pH 8
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## 常规信息

<b>功能</b>	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.
<b>组织特异性</b>	Isoform 1 is expressed in pancreas. Isoform 2 and isoform 3 is expressed in liver.
<b>疾病相关</b>	Defects in GCK are the cause of maturity-onset diabetes of the young type 2 (MODY2) [MIM:125851]; also shortened MODY-2. MODY is a form of diabetes that is characterized by an autosomal dominant mode of inheritance, onset in childhood or early adulthood (usually before 25 years of age), a primary defect in insulin secretion and frequent insulin-independence at the beginning of the disease. Defects in GCK are the cause of familial hyperinsulinemic hypoglycemia type 3 (HHF3) [MIM:602485]; also known as persistent hyperinsulinemic hypoglycemia of infancy (PHHI) or congenital hyperinsulinism. HHF is the most common cause of persistent hypoglycemia in infancy. Unless early and aggressive intervention is undertaken, brain damage from recurrent episodes of hypoglycemia may occur.
<b>序列相似性</b>	Belongs to the hexokinase family.

**Please note:** All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE"

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