# abcam

## Product datasheet

## Recombinant Human Glucokinase protein ab85977

## 1 图像

#### 描述

产品名称 重组人Glucokinase蛋白

纯**度** > 95 % SDS-PAGE.

purified by using conventional chromatography techniques.

表达系统 Escherichia coli

Accession P35557

**蛋白长度** Full length protein

无动物成分 No

性质 Recombinant

种属 Human

序列 MGSSHHHHHH SSGLVPRGSH MLDDRARMEA

AKKEKVEQIL AEFQLQEEDL KKVMRRMQKE
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

TPSCEITFIE SEEGSGRGAA LVSAVACKKA CMLGQ

VMRITVGVDG SVYKLHPSFK ERFHASVRRL

#### 技术指标

Our Abpromise guarantee covers the use of ab85977 in the following tested applications.

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

应用 SDS-PAGE

形式 Liquid

1

#### 制备和贮存

#### 稳定性和存储

Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid repeated freeze / thaw cycles.

pH: 8.00

Constituents: 0.316% Tris HCI, 10% Glycerol (glycerin, glycerine)

#### 常规信息

#### 功能

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.

## 组织特异性

## 疾病相关

 $\label{looping:equation:constraints} Is of orm \ 1 \ is \ expressed \ in \ pancreas. \ Is of orm \ 2 \ and \ is of orm \ 3 \ is \ expressed \ in \ liver.$ 

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.

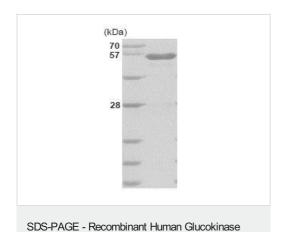
Defects in GCK are the cause of familial hyperinsulinemic hypoglycemia type 3 (HHF3) [MIM:602485]; also known as persistent hyperinsulinemic hypoglycemia of infancy (PHHI) or congenital hyperinsulinism. HHF is the most common cause of persistent hypoglycemia in infancy. Unless early and aggressive intervention is undertaken, brain damage from recurrent episodes of hypoglycemia may occur.

#### 序列相似性

protein (ab85977)

Belongs to the hexokinase family.

## 图片



15% SDS-PAGE showing ab85977 at approximately 54.3kDa.

 $\textbf{Please note:} \ \ \textbf{All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"}$ 

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