# abcam

## Product datasheet

## Recombinant Human Glucokinase protein ab85977

## 画像数1

#### 製品の詳細

製品名 Recombinant Human Glucokinase protein

精製度 > 95 % SDS-PAGE.

purified by using conventional chromatography techniques.

**発現系** Escherichia coli

アクセッション番号 <u>P35557</u>

タンパク質長 Full length protein

Animal free No

**由来** Recombinant

生物種 Human

配列 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
VMRITVGVDG SVYKLHPSFK ERFHASVRRL

TPSCEITFIE SEEGSGRGAA LVSAVACKKA CMLGQ

#### 特性

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.

アプリケーション SDS-PAGE

製品の状態 Liquid

1

#### 前処理および保存

## 保存方法および安定性

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)

#### 関連情報

#### 機能

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.

## 組織特異性

## 関連疾患

Isoform 1 is expressed in pancreas. Isoform 2 and isoform 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.

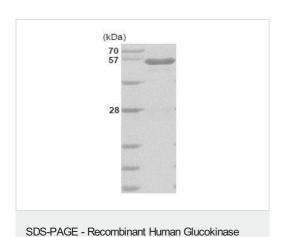
Defects in GCK are the cause of familial hyperinsulinemic hypoglycemia type 3 (HHF3) [MIM:602485]; also known as persistent hyperinsulinemic hypoglycemia of infancy (PHHI) or congenital hyperinsulinism. HHF is the most common cause of persistent hypoglycemia in infancy. Unless early and aggressive intervention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

### 配列類似性

protein (ab85977)

Belongs to the hexokinase family.

## 画像



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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- · Replacement or refund for products not performing as stated on the datasheet
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- Extensive multi-media technical resources to help you
- · We investigate all quality concerns to ensure our products perform to the highest standards

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