# abcam

### Product datasheet

## Recombinant Human Glucokinase protein ab82190

描述

产品名称 重组人Glucokinase蛋白

纯**度** > 95 % SDS-PAGE.

ab82190 is greater than 95% homogeneous based on SDS-PAGE analysis, purified by affinity

and FPLC chromatography.

表达系统 Escherichia coli

**蛋白长度** Full length protein

无动物成分 No

性质 Recombinant

种属Human预测分子量52 kDa

技术指标

Our Abpromise guarantee covers the use of ab82190 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

制备和贮存

稳**定性和存储** Shipped on dry ice. Upon delivery aliquot and store at -80℃. Avoid freeze / thaw cycles.

pH: 7.9

Constituents: 0.75% Potassium chloride, 0.0154% DTT, 0.316% Tris HCI, 0.00584% EDTA, 20%

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

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hepatic glucose usage.

组织特异性 soform 1 is expressed in pancreas. soform 2 and isoform 3 is expressed in liver.

疾病相关 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** Belongs to the hexokinase family.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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