

Recombinant E. coli Glucokinase protein (Active) ab208303

1 图像

描述	
产品名称	重组E. coli Glucokinase蛋白(Active)
生物活性	Specific activity is > 70 units/mg obtained by measuring the increase of NADPH in absorbance at 340 nm resulting from the reduction of NADP. One unit will oxidize 1.0 umole of Glucose to D-glucose 6-phosphate per minute in the presence of Beta-NADP at pH 9.0 at 37°C.
纯度	> 95 % SDS-PAGE. ab208303 was purified by conventional chromatography techniques
表达系统	Escherichia coli
Accession	<b>P0A6V8</b>
蛋白长度	Full length protein
无动物成分	No
性质	Recombinant
种属	Escherichia coli
序列	MGSSHHHHHH SSGLVPRGSH MGSMTKYALV GDVGGTNARL ALCDIASGEI SQAKTYSGLD YPSLEAVIRV YLEEHKVEVK DGCIAIACPI TGDWVAMTNH TWAFSIAEMK KNLGFSHLEI INDFTAVSMA IPMLKKEHLI QFGGAEPVEG KPIAVYGAGT GLGVAHLVHV DKRWVSLPGE GGHVDFAPNS EEEAIILEIL RAEIGHVSAE RVLSGPGLVN LYRAIVKADN RLPENLKPKD ITERALADSC TDCRRALSLF CVIMGRFGGN LALNLGTFGG VFIAGGIVPR FLEFFKASGF RAAFEDKGRF KEYVHDIPVY LIVHDNPGLL GSGAHLRQTL GHIL
预测分子量	37 kDa including tags
氨基酸	1 to 321
标签	His tag N-Terminus
额外的序列信息	NP_416889
描述	重组 <i>E. coli</i> Glucokinase蛋白(Active)
技术指标	

Our **Abpromise guarantee** covers the use of **ab208303** in the following tested applications.

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

应用	Functional Studies
	Mass Spectrometry
	SDS-PAGE
质谱法	MALDI-TOF
形式	Liquid

## 制备和贮存

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稳定性和存储	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
	pH: 8.00
	Constituents: 0.32% Tris HCl, 10% Glycerol (glycerin, glycerine), 0.87% Sodium chloride
	This product is an active protein and may elicit a biological response in vivo, handle with caution.

## 常规信息

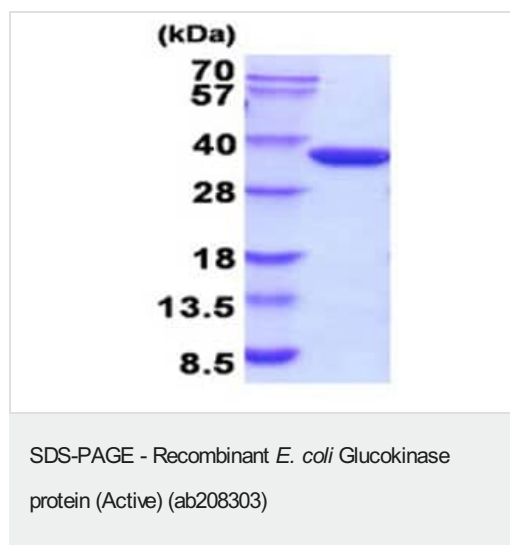
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功能	Catalyzes the initial step in utilization of glucose by the beta-cell and liver at physiological glucose concentration. Glucokinase has a high Km for glucose, and so it is effective only when glucose is abundant. The role of GCK is to provide G6P 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	Isoform 1 is expressed in pancreas. Isoform 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.

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## 图片

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15% SDS-PAGE analysis of ab208303 (3 µg)

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

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