abcam

Product datasheet

Anti-Glucokinase antibody [EPR10374] - BSA and Azide free ab249216



2 Images

Overview

Product name Anti-Glucokinase antibody [EPR10374] - BSA and Azide free

Description Rabbit monoclonal [EPR10374] to Glucokinase - BSA and Azide free

Host species Rabbit

Tested applications Suitable for: WB

Unsuitable for: Flow Cyt,ICC/IF,IHC-P or IP

Species reactivity Reacts with: Human

Immunogen Recombinant fragment corresponding to Human Glucokinase.

Database link: P35557

General notes ab249216 is the carrier-free version of ab155962.

> Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.

This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cellbased assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

This product is compatible with the Maxpar[®] Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar[®] is a trademark of Fluidigm Canada Inc.

This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free production

For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

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Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C. Do Not Freeze.

EPR10374

Storage buffer pH: 7.2

Constituent: PBS

Carrier free Yes

Purity Affinity purified
Clonality Monoclonal

Isotype IgG

Applications

Clone number

The Abpromise guarantee Our Abpromise guarantee covers the use of ab249216 in the following tested applications.

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

Application	Abreviews	Notes
WB		Use at an assay dependent concentration. Predicted molecular weight: 52 kDa.

Application notes Is unsuitable for Flow Cyt,ICC/IF,IHC-P or IP.

Target

Function 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.

Tissue specificity Isoform 1 is expressed in pancreas. Isoform 2 and isoform 3 is expressed in liver.

Involvement in disease Defects in GCK are the cause of maturity-onset diabetes of the young type 2 (MODY2)

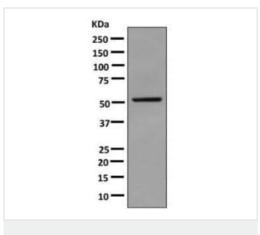
[MIM:125851]; also shortened MODY-2. MODY is a form of diabetes that is characterized by an autosomal dominant mode of inheritance, onset in childhood or early adulthood (usually before 25 years of age), a primary defect in insulin secretion and frequent insulin-independence at the

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.

Sequence similarities Belongs to the hexokinase family.



Western blot - Anti-Glucokinase antibody [EPR10374] - BSA and Azide free (ab249216) Anti-Glucokinase antibody [EPR10374] (ab155962) at 1/50000 dilution + BxPC-3 cell lysate at 10 µg

Secondary

HRP labelled goat anti-rabbit at 1/2000 dilution

Predicted band size: 52 kDa

This data was developed using <u>ab155962</u>, the same antibody clone in a different buffer formulation.



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

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