

Anti-Glucokinase Antibody [JE33-40]

HA722204



Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human
Applications:	WB
Molecular Wt:	Predicted band size: 52 kDa
Clone number:	JE33-40

Description: Glucokinase (EC 2.7.1.2) is an enzyme that facilitates phosphorylation of glucose to glucose-6-phosphate. Glucokinase occurs in cells in the liver and pancreas of humans and most other vertebrates. In each of these organs it plays an important role in the regulation of carbohydrate metabolism by acting as a glucose sensor, triggering shifts in metabolism or cell function in response to rising or falling levels of glucose, such as occur after a meal or when fasting. Mutations of the gene for this enzyme can cause unusual forms of diabetes or hypoglycemia. Glucokinase (GK) is a hexokinase isozyme, related homologously to at least three other hexokinases.[4] All of the hexokinases can mediate phosphorylation of glucose to glucose-6-phosphate (G6P), which is the first step of both glycogen synthesis and glycolysis. However, glucokinase is coded by a separate gene and its distinctive kinetic properties allow it to serve a different set of functions. Glucokinase has a lower affinity for glucose than the other hexokinases do, and its activity is localized to a few cell types, leaving the other three hexokinases as more important preparers of glucose for glycolysis and glycogen synthesis for most tissues and organs. Because of this reduced affinity, the activity of glucokinase, under usual physiological conditions, varies substantially according to the concentration of glucose.

Immunogen: Recombinant protein within Human Glucokinase aa 216-465 / 465.

Positive control: SiHa cell lysate, BxPC-3 cell lysate, HeLa cell lysate, Huh7 cell lysate.

Subcellular location: Cytoplasm, Nucleus, Mitochondrion.

Database links: SwissProt: P35557 Human

Recommended Dilutions:

WB 1:1,000

Storage Buffer: 1*TBS (pH7.4), 0.05% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Shipped at 4℃. Store at +4℃ short term (1-2 weeks). Store at -20℃ long term.

Purity: Protein A affinity purified.

Hangzhou Huaan Biotechnology Co., Ltd.

Orders:0086-571-88062880

Technical:0086-571-89986345

Service mail:support@huabio.cn

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Applications:WB=Western blot IHC-P=Immunohistochemistry (paraffin) IF-Cell=Immunofluorescence (Cell) IF-Tissue=Immunofluorescence (Tissue) FC=Flow cytometry IP=Immunoprecipitation

Images

Fig1: Western blot analysis of Glucokinase on different lysates with Rabbit anti-Glucokinase antibody (HA722204) at 1/1,000 dilution.

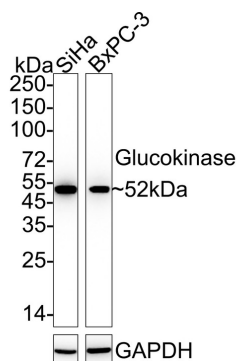
Lane 1: SiHa cell lysate
Lane 2: BxPC-3 cell lysate

Lysates/proteins at 20 µg/Lane.

Predicted band size: 52 kDa
Observed band size: 52 kDa

Exposure time: 21 seconds; ECL: K1801;

4-20% SDS-PAGE gel.



Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (HA722204) at 1/1,000 dilution was used in 5% NFDM/TBST at 4°C overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

Fig2: Western blot analysis of Glucokinase on different lysates with Rabbit anti-Glucokinase antibody (HA722204) at 1/1,000 dilution.

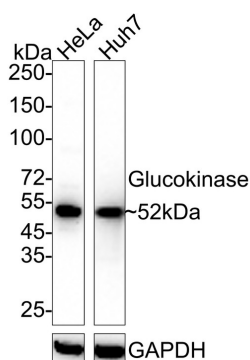
Lane 1: HeLa cell lysate
Lane 2: Huh7 cell lysate

Lysates/proteins at 20 µg/Lane.

Predicted band size: 52 kDa
Observed band size: 52 kDa

Exposure time: 10 seconds; ECL: K1802;

4-20% SDS-PAGE gel.



Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (HA722204) at 1/1,000 dilution was used in 5% NFDM/TBST at 4°C overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

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Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

Background References

1. Ashcroft FM et al. Glucokinase activity in diabetes: too much of a good thing? Trends Endocrinol Metab. 2023 Feb
2. Ren Y et al. Glucokinase as an emerging anti-diabetes target and recent progress in the development of its agonists. J Enzyme Inhib Med Chem. 2022 Dec

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