bs-1796R **[Primary Antibody]**

GLK Rabbit pAb

www.bioss.com.cn
sales@bioss.com.cn
techsupport@bioss.com.cn
400-901-9800

DATASHEET

Host: Rabbit **Isotype:** IgG

Clonality: Polyclonal

GeneID: 2645 **SWISS:** P35557

Target: GLK

Immunogen: KLH conjugated synthetic peptide derived from human GCK: 101-200/465.

Purification: affinity purified by Protein A

Concentration: 1mg/ml

Storage: 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

Background: Hexokinases phosphorylate glucose to produce glucose 6 phosphate, thus committing glucose to the glycolytic pathway. Alternative splicing of this gene results in three tissue specific forms of glucokinase, one found in pancreatic islet beta cells and two found in liver. The protein localizes to the outer membrane of mitochondria. In contrast to other forms of hexokinase, this enzyme is not inhibited by its product glucose 6 phosphate but remains active while glucose is abundant. Mutations in this gene have been associated with non insulin dependent diabetes mellitus, also called maturity onset diabetes of the young, type 2; mutations have also been associated with persistent hyperinsulinemic hypoglycemia of infancy (PHHI).

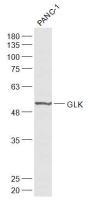
Applications: **WB** (1:500-2000)
Flow-Cyt (3ug/Test)
ICC/IF (1:100)

Reactivity: Human, Rat
(predicted: Mouse, Rabbit, Pig, Chicken, Dog, Horse)

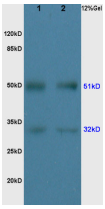
Predicted MW.: 51 kDa

Subcellular Location: Cytoplasm ,Nucleus

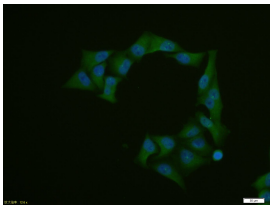
VALIDATION IMAGES



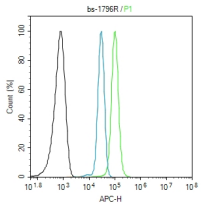
Sample: Panc-1(Human) Cell Lysate at 30 ug
Primary: Anti-GLK (bs-1796R) at 1/1000 dilution
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 51 kD
Observed band size: 51 kD



Protein: rat liver lysates, 30ug; Primary: Anti-GLK(bs-1796R) at 1:200; Secondary: HRP conjugated Goat Anti-Rabbit IgG(bs-0295G-HRP) at 1: 3000; ECL excitated the fluorescence; Predicted band size : 51kD Observed band size : 51kD



Hela cell; 4% Paraformaldehyde-fixed; Triton X-100 at room temperature for 20 min; Blocking buffer (normal goat serum, C-0005) at 37°C for 20 min; Antibody incubation with (GLK) polyclonal Antibody, Unconjugated (bs-1796R) 1:100, 90 minutes at 37°C; followed by a conjugated Goat Anti-Rabbit IgG antibody at 37°C for 90 minutes, DAPI (blue, C02-04002) was used to stain the cell nuclei.



Blank control: A431. Primary Antibody (green line): Rabbit Anti-GLK antibody (bs-1796R) Dilution: 1µg /10^6 cells; Isotype Control Antibody (orange line): Rabbit IgG . Secondary

Antibody: Goat anti-rabbit IgG-AF647 Dilution: 1μg /test. Protocol The cells were fixed with 4% PFA (10min at room temperature)and then permeabilized with 0.1% PBST for 20 min at room temperature. The cells were then incubated in 5%BSA to block non-specific protein-protein interactions for 30 min at room temperature .Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.

SELECTED CITATIONS

- **[IF=4.784]** Pan Y et al. Regulatory effect of Grifola frondosa extract rich in polysaccharides and organic acids on glycolipid metabolism and gut microbiota in rats. Int J Biol Macromol. 2019 Nov 8. pii: S0141-8130(19)37563-4. WB ;Rat. 31712147
- **[IF=4.414]** Pasula, Madhu Babu. et al. Sex Dimorphic Glucose Transporter-2 Regulation of Hypothalamic Astrocyte Glucose and Energy Sensor Expression and Glycogen Metabolism. NEUROCHEM RES. 2022 Sep;:1-14 WB ;Rat. 36173588
- **[IF=3.483]** Qiu F et al. Metabolic effects of mulberry branch bark powder on diabetic mice based on GC-MS metabolomics approach. Nutr Metab (Lond). 2019 Jan 31;16:10. WB ;Mouse. 30733818
- **[IF=2.5]** Karen P Briski. et al.Astrocyte glucose-6-phosphatase-Beta regulates ventromedial hypothalamic nucleus glucose counterregulatory neurotransmission and systemic hormone profiles..Neuropeptides.2025 Mar 18:111:102519. Western blot ;. 40132240
- **[IF=2.43]** Wang, Ping, et al. "Effects of a Novel Glucokinase Activator, HMS5552, on Glucose Metabolism in a Rat Model of Type 2 Diabetes Mellitus." Journal of Diabetes Research 2017 (2017). WB,IHC ;="Rat". 28191470