

**Rabbit Anti-Glucokinase/GCK Polyclonal: RC0012**

**Intended Use:** For Research Use Only

**Description:** 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.

**Specifications**

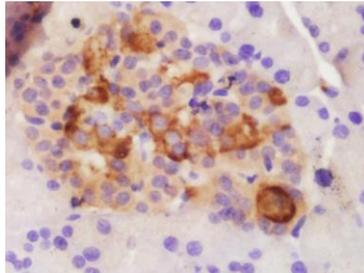
Clone: Polyclonal  
Source: Rabbit  
Isotype: IgG  
Reactivity: Human, mouse, rat  
Localization: Cytoplasm, nucleus  
Formulation: Purified antibody in PBS pH7.4, containing BSA, glycerol, < 0.05% sodium azide (NaN3)  
Storage: Store at 2°- 8°C  
Applications: IHC, ICC/IF, WB  
Package:

Description	Catalog No.	Size
Glucokinase/GCK Polyclonal Concentrated	RC0012	1 ml

**IHC Procedure\***

Positive Control Tissue: Breast carcinoma, hepatocarcinoma, HepG2 and mouse liver tissue cell lysates  
Concentrated Dilution: 10-100  
Pretreatment: Citrate pH6.0 or EDTA pH8.0, 15 minutes using Pressure Cooker, or 30-60 minutes using water bath at 95°-99°C  
Incubation Time and Temp: 30-60 minutes @ RT  
Detection: Refer to the detection system manual

\* Result should be confirmed by an established diagnostic procedure.



FFPE rat pancreas stained with anti-GCK using DAB

**References:**

- 1-deoxyojirimycin inhibits glucose absorption and accelerates glucose metabolism in streptozotocin-induced diabetic mice. Li YG, et al. Sci Rep 3:1377, 2013.
- Cooperative anti-diabetic effects of deoxyojirimycin-polysaccharide by inhibiting glucose absorption and modulating glucose metabolism in streptozotocin-induced diabetic mice. Li YG, et al. PLoS One 8:e65892, 2013.
- Ultrastructural analysis, zinc transporters, glucose transporters and hormones expression in new world primate (Callithrix jacchus) and human pancreatic islets. Mohanasundaram D, et al. Gen Comp Endocrinol : 2011.
- Glucocorticoids in vivo induce both insulin hypersecretion and enhanced glucose sensitivity of stimulus-secretion coupling in isolated rat islets. Rafacho A, et al. Endocrinology 151:85-95, 2010.