

**GCKR Antibody (N-Term)**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP21592a**

**Specification**

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**GCKR Antibody (N-Term) - Product Information**

Application	WB,E
Primary Accession	<a href="#">Q14397</a>
Reactivity	Human
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Calculated MW	68685

**GCKR Antibody (N-Term) - Additional Information**

**Gene ID** 2646

**Other Names**

Glucokinase regulatory protein, GGRP, Glucokinase regulator, GCKR

**Target/Specificity**

This GCKR antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 40-72 amino acids from human GCKR.

**Dilution**

WB~~1:2000

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

GCKR Antibody (N-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

**GCKR Antibody (N-Term) - Protein Information**

**Name** GCKR {ECO:0000303|PubMed:8589523, ECO:0000312|HGNC:HGNC:4196}

**Function** Regulates glucokinase (GCK) by forming an inactive complex with this enzyme (PubMed:[23621087](#), PubMed:[23733961](#)). Acts by promoting GCK recruitment to the nucleus, possibly to provide a reserve of GCK that can be quickly released in the cytoplasm after a meal (PubMed:[10456334](#)). The affinity of GCKR for GCK is modulated by fructose metabolites: GCKR

with bound fructose 6-phosphate has increased affinity for GCK, while GCKR with bound fructose 1-phosphate has strongly decreased affinity for GCK and does not inhibit GCK activity (PubMed:[23621087](#), PubMed:[23733961](#)).

#### Cellular Location

Cytoplasm. Nucleus. Mitochondrion {ECO:0000250|UniProtKB:Q07071}. Note=Under low glucose concentrations, GCKR associates with GCK and the inactive complex is recruited to the hepatocyte nucleus.

#### Tissue Location

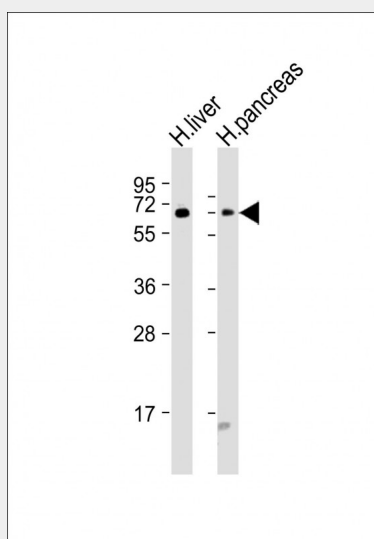
Found in liver and pancreas. Not detected in muscle, brain, heart, thymus, intestine, uterus, adipose tissue, kidney, adrenal, lung or spleen.

### GCKR Antibody (N-Term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### GCKR Antibody (N-Term) - Images



All lanes : Anti-GCKR Antibody (N-Term) at 1:2000 dilution Lane 1: human liver lysates Lane 2: human pancreas lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 69 kDa Blocking/Dilution buffer: 5% NFDN/TBST.

### GCKR Antibody (N-Term) - Background

Inhibits glucokinase (GCK) by forming an inactive complex with this enzyme. The affinity of GCKR for GCK is modulated by fructose metabolites: GCKR with bound fructose 6- phosphate has

increased affinity for GCK, while GCKR with bound fructose 1-phosphate has strongly decreased affinity for GCK and does not inhibit GCK activity.

#### **GCKR Antibody (N-Term) - References**

Warner J.P., et al. Mamm. Genome 6:532-536(1995).  
Hayward B.E., et al. Genomics 49:137-142(1998).  
Ota T., et al. Nat. Genet. 36:40-45(2004).  
Hillier L.W., et al. Nature 434:724-731(2005).  
de la Iglesia N., et al. FEBS Lett. 456:332-338(1999).