10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

GCKR Antibody (N-Term)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP21610a

Specification

GCKR Antibody (N-Term) - Product Information

Application	**WB,E**
Primary Accession	Q14397
Reactivity	**Mouse, Rat**
Host	**Rabbit**
Clonality	**polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**68685**

GCKR Antibody (N-Term) - Additional Information

Gene ID 2646

Other Names
Glucokinase regulatory protein, GKRP, Glucokinase regulator, GCKR

Target/Specificity
This GCKR antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 87-120 amino acids from human GCKR.

Dilution
WB~~1:2000
E~~Use at an assay dependent concentration.

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.

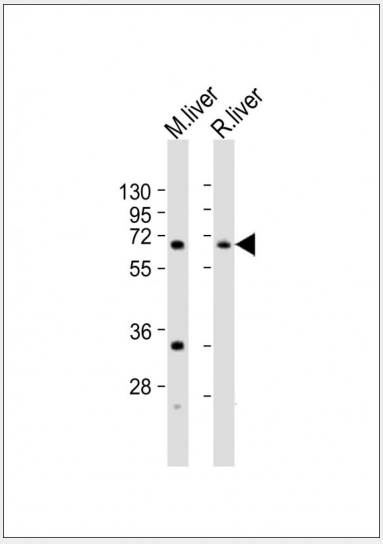
Tissue Location
Found in liver and pancreas. Not detected in muscle, brain, heart, thymus, intestine, uterus, adipose tissue, kidney, adrenal, lung or spleen.

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 Cytomety
- Cell Culture

GCKR Antibody (N-Term) - Images



All lanes : Anti-GCKR Antibody (N-Term) at 1:2000 dilution Lane 1: mouse liver lysates Lane 2: rat liver 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% NFDM/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).