# GCKR (m): 293T Lysate: sc-120452



The Power to Question

# **BACKGROUND**

Glucokinase (also designated hexokinase IV or GCK) plays a key role in the regulation of glucose-induced Insulin secretion. GCK is expressed in pancreatic  $\beta$  cells, where it functions as a glucose sensor, determining the "set point" for Insulin secretion. GCK is also expressed in the liver, where it catalyzes the first step in the disposal of glucose. A lack of glucokinase activity leads to reduced Insulin secretion and hyperglycemia and has been implicated as a cause for maturity onset diabetes of the youth (MODY). Heterozygous point mutations in the gene encoding GCK have been detected in individuals suffering from MODY. GCK is regulated by GCKR (glucokinase regulatory protein).

# **REFERENCES**

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# CHROMOSOMAL LOCATION

Genetic locus: Gckr (mouse) mapping to 5 B1.

### **PRODUCT**

GCKR (m): 293T Lysate represents a lysate of mouse GCKR transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

# **STORAGE**

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

#### **APPLICATIONS**

GCKR (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive GCKR antibodies. Recommended use: 10-20 µl per lane.

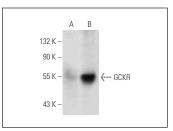
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

GCKR (G-6): sc-166841 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse GCKR expression in GCKR transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

# **RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-lgG $\kappa$  BP-HRP: sc-516102 or m-lgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker<sup>TM</sup> Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

# **DATA**



GCKR (G-6): sc-166841. Western blot analysis of GCKR expression in non-transfected: sc-117752 (**A**) and mouse GCKR transfected: sc-120452 (**B**) 293T whole

#### **RESEARCH USE**

For research use only, not for use in diagnostic procedures.

#### **PROTOCOLS**

See our web site at www.scbt.com for detailed protocols and support products.

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