



## GCKR (1-300): sc-4501 WB

### 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). GCKR is a 68 kDa protein which is expressed in pancreatic  $\beta$  cells and in the liver.

### REFERENCES

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### SOURCE

GCKR (1-300) is expressed in *E. coli* as a 43 kDa tagged fusion protein corresponding to amino acids 1-300 of GCKR (glucokinase regulator) of human origin.

### PRODUCT

GCKR (1-300) is purified from bacterial lysates (>98%) by column chromatography; supplied as 10  $\mu$ g protein in 0.1 ml SDS-PAGE loading buffer.

### APPLICATIONS

GCKR (1-300) is suitable as a Western blotting control for sc-11416 and sc-6340.

### STORAGE

Store at -20° C; stable for one year from the date of shipment.

### RESEARCH USE

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