SANTA CRUZ BIOTECHNOLOGY, INC.

KIR6.2 (H-55): sc-20809

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

ATP-sensitive K^+ channels play important roles in many cellular functions by coupling cell metabolism to electrical activity. KIR6.1 and KIR6.2 are members of the KIR (inwardly rectifying potassium channel) family of potassium channels. Inward rectifying K^+ channels possess a greater tendency to allow potassium to flow into the cell rather than out of it. These channels comprise two subunits: a KIR6.0 subfamily component and a SUR component, which is a member of the ATP-binding cassette protein superfamily. Mutations in the gene coding for these channels are a cause of an autosomal recessive disorder characterized by unregulated Insulin secretion. The amino-terminal and carboxyl-terminal domains of KIR channel subunits are both intracellular, and the two intracellular domains of KIR6.2 physically interact with each other.

CHROMOSOMAL LOCATION

Genetic locus: KCNJ11 (human) mapping to 11p15.1.

SOURCE

KIR6.2 (H-55) is a rabbit polyclonal antibody raised against amino acids 336-390 of KIR6.2 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

KIR6.2 (H-55) is recommended for detection of KIR6.2 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

KIR6.2 (H-55) is also recommended for detection of KIR6.2 in additional species, including equine and canine.

Suitable for use as control antibody for KIR6.2 siRNA (h): sc-42628, KIR6.2 shRNA Plasmid (h): sc-42628-SH and KIR6.2 shRNA (h) Lentiviral Particles: sc-42628-V.

Molecular Weight of KIR6.2: 40-56 kDa.

Positive Controls: MIA PaCa-2 cell lysate: sc-2285.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

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

PROTOCOLS

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

SELECT PRODUCT CITATIONS

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8. Geng, X., et al. 2011. α-Synuclein binds the K(ATP) channel at Insulin-secretory granules and inhibits Insulin secretion. Am. J. Physiol. Endocrinol. Metab. 300: E276-E286.
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14. Du, R.H., et al. 2014. Kir6.2-containing ATP-sensitive K^+ channel is required for cardioprotection of resveratrol in mice. Cardiovasc. Diabetol. 13: 35.