

KCNV2 (N-16): sc-168247

BACKGROUND

Voltage-gated potassium channels play an essential role in controlling cellular excitability in the nervous system. They regulate a variety of properties including membrane potential as well as the frequency and structure of action potentials. KCNV2 (potassium channel, subfamily V, member 2), also known as KV11.1, is a 562 amino acid multi-pass membrane protein that belongs to the potassium channel family, the V subfamily and the Kv8.2/KCNV2 sub-subfamily. KCNV2 forms a heteromultimer with KV2.1, KV3.1 and KIR2.1. Considered a potassium channel subunit, KCNV2 modulates channel activity by shifting the threshold and the half-maximal activation to more negative values. KCNV2 is encoded by a gene located on human chromosome 9p24.2 and mouse chromosome 19 C1. Human chromosome 9 consists of about 145 million bases and encodes nearly 900 genes.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: KCNV2 (human) mapping to 9p24.2.

SOURCE

KCNV2 (N-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an N-terminal cytoplasmic domain of KCNV2 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.

Blocking peptide available for competition studies, sc-168247 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

KCNV2 (N-16) is recommended for detection of KCNV2 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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); non cross-reactive with KCNV1.

Suitable for use as control antibody for KCNV2 siRNA (h): sc-92827, KCNV2 shRNA Plasmid (h): sc-92827-SH and KCNV2 shRNA (h) Lentiviral Particles: sc-92827-V.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

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.