

KCNC3 (Y-31): sc-81880

BACKGROUND

KCNC3 (potassium voltage-gated channel subfamily C member 3) is a multi-pass membrane-bound protein that acts as an ion channel and is generally expressed as a heterotetramer of potassium channeling proteins. The corneal epithelium is an important cell layer that functions to separate the corneal stroma from the anterior chamber of the eye. Increased expression of KCNC3 in confluent corneal endothelial cells suggests that the ionic current maintained by KCNC3 acts to regulate the hydration and transparency of the corneal stroma. Potassium channel regulation is also important for the high-frequency firing of cerebellar neurons. Defects, primarily missense mutations, in the gene encoding the KCNC3 protein have been attributed to neurological developmental disorders and adult onset neurological diseases.

REFERENCES

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STORAGE

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

CHROMOSOMAL LOCATION

Genetic locus: KCNC3 (human) mapping to 19q13.33; Kcnc3 (mouse) mapping to 7 B4.

SOURCE

KCNC3 (Y-31) is a mouse monoclonal antibody raised against recombinant KCNC3 of human origin.

PRODUCT

Each vial contains 50 µg IgG₁ in 500 µl PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

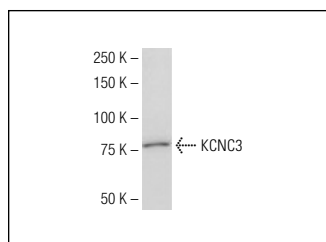
KCNC3 (Y-31) is recommended for detection of KCNC3 of mouse and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for KCNC3 siRNA (h): sc-97185, KCNC3 siRNA (m): sc-146356, KCNC3 shRNA Plasmid (h): sc-97185-SH, KCNC3 shRNA Plasmid (m): sc-146356-SH, KCNC3 shRNA (h) Lentiviral Particles: sc-97185-V and KCNC3 shRNA (m) Lentiviral Particles: sc-146356-V.

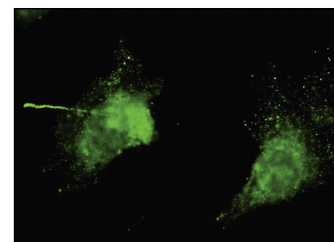
Molecular Weight of KCNC3: 81 kDa.

Positive Controls: NIH/3T3 whole cell lysate: sc-2210.

DATA



KCNC3 (Y-31): sc-81880. Western blot analysis of KCNC3 expression in NIH/3T3 whole cell lysate.



KCNC3 (Y-31): sc-81880. Immunofluorescence staining of paraformaldehyde-fixed NIH/3T3 cells showing membrane and cytoplasmic localization.

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.