

Sidekick-1 (N-15): sc-163376

BACKGROUND

Cell adhesion molecules influence cell growth, differentiation, embryogenesis, immune response and cancer metastasis by networking information from the extracellular matrix to the cell. Sidekick-1 (SDK1) is a 2,213 amino acid single-pass membrane protein that functions as a cell adhesion molecule by guiding axonal terminals to specific synapses in developing neurons. Existing as three alternatively spliced isoforms, Sidekick-1 is expressed in retinal neurons and contains thirteen fibronectin type-III domains and six Ig-like C₂-type (immunoglobulin-like) domains. Sidekick-1 expression is upregulated in glomeruli of patients with HIV-associated nephropathy, where it leads to podocyte dysfunction. The gene encoding Sidekick-1 maps to human chromosome 7p22.2 and murine chromosome 5 G2.

REFERENCES

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5. Online Mendelian Inheritance in Man, OMIM[™]. 2008. Johns Hopkins University, Baltimore, MD. MIM Number: 607216. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
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7. Kaufman, L., Potla, U., Coleman, S., Dikiy, S., Hata, Y., Kurihara, H., He, J.C., D'Agati, V.D. and Klotman, P.E. 2010. Upregulation of the homophilic adhesion molecule sidekick-1 in podocytes contributes to glomerulosclerosis. *J. Biol. Chem.* 285: 25677-25685.

CHROMOSOMAL LOCATION

Genetic locus: SDK1 (human) mapping to 7p22.2; Sdk1 (mouse) mapping to 5 G2.

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.

SOURCE

Sidekick-1 (N-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Sidekick-1 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-163376 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Sidekick-1 (N-15) is recommended for detection of Sidekick-1 of mouse, rat and 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 Sidekick-1 isoform 2; non cross-reactive with Sidekick-2.

Sidekick-1 (N-15) is also recommended for detection of Sidekick-1 in additional species, including equine and canine.

Suitable for use as control antibody for Sidekick-1 siRNA (h): sc-89632, Sidekick-1 siRNA (m): sc-153459, Sidekick-1 shRNA Plasmid (h): sc-89632-SH, Sidekick-1 shRNA Plasmid (m): sc-153459-SH, Sidekick-1 shRNA (h) Lentiviral Particles: sc-89632-V and Sidekick-1 shRNA (m) Lentiviral Particles: sc-153459-V.

Molecular Weight of Sidekick-1 isoforms: 242/30/240 kDa.

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.

PROTOCOLS

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