

# Sidekick-2 (D-14): sc-165488

## BACKGROUND

Sidekick-2 (SDK2), also known as KIAA1514, is a 2,172 amino acid single-pass type I membrane protein containing 13 Fibronectin type-III domains and 6 Ig-like C<sub>2</sub>-type (immunoglobulin-like) domains. Acting as a cell adhesion protein, Sidekick-2 guides axonal terminals to synapses in developing neurons. Sidekick-2 may require the interaction with MAGI scaffolding proteins for proper localization and function. Existing as four alternatively spliced isoforms, the gene encoding Sidekick-2 maps to human chromosome 17q25.1. Chromosome 17 makes up over 2.5% of the human genome with about 81 million bases encoding over 1,200 genes. Neurofibromatosis, a condition characterized by neural and epidermal lesions, and dysregulated Schwann cell growth have been linked to chromosome 17. Alexander disease, Birt-Hogg-Dube syndrome and Canavan disease are also associated with chromosome 17.

## REFERENCES

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3. Hayashi, K., Kaufman, L., Ross, M.D. and Klotman, P.E. 2005. Definition of the critical domains required for homophilic targeting of mouse sidekick molecules. *FASEB J.* 19: 614-616.
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6. Gauci, S., Helbig, A.O., Slijper, M., Krijgsveld, J., Heck, A.J. and Mohammed, S. 2009. Lys-N and Trypsin cover complementary parts of the phosphoproteome in a refined SCX-based approach. *Anal. Chem.* 81: 4493-4501.
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## CHROMOSOMAL LOCATION

Genetic locus: SDK2 (human) mapping to 17q25.1; Sdk2 (mouse) mapping to 11 E2.

## SOURCE

Sidekick-2 (D-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of Sidekick-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.

Blocking peptide available for competition studies, sc-165488 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

Sidekick-2 (D-14) is recommended for detection of Sidekick-2 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.

Sidekick-2 (D-14) is also recommended for detection of Sidekick-2 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Sidekick-2 siRNA (h): sc-94033, Sidekick-2 siRNA (m): sc-153460, Sidekick-2 shRNA Plasmid (h): sc-94033-SH, Sidekick-2 shRNA Plasmid (m): sc-153460-SH, Sidekick-2 shRNA (h) Lentiviral Particles: sc-94033-V and Sidekick-2 shRNA (m) Lentiviral Particles: sc-153460-V.

Molecular Weight of Sidekick-2 isoforms 1/2/3/4: 239/211/237/244 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.

## 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](http://www.scbt.com) or our catalog for detailed protocols and support products.