

ARHGEF39 (S-14): sc-163946

BACKGROUND

C9orf100 (chromosome 9 open reading frame 100), also known as ARHGEF39, is a 335 amino acid protein that functions as a nucleotide exchange factor and contains one DH (DBL-homology) domain and a PH domain. C9orf100 exists as four alternatively spliced isoforms that are encoded by a gene located on human chromosome 9. Chromosome 9 consists of about 145 million bases, represents 4% of the human genome and encodes nearly 900 genes. Thought to play a role in gender determination, deletion of the distal portion of 9p can lead to development of male to female sex reversal, the phenotype of a female with a male X,Y genotype. Hereditary hemorrhagic telangiectasia, which is characterized by harmful vascular defects, is associated with the chromosome 9 gene encoding endoglin protein, ENG. Familial dysautonomia is also associated with chromosome 9 through the gene IKBKAP. Notably, chromosome 9 encompasses the largest interferon family gene cluster. Chromosome 9 is partnered with chromosome 22 in the translocation leading to the aberrant production of BCR-ABL fusion protein often found in leukemias.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: ARHGEF39 (human) mapping to 9p13.3; Arhgef39 (mouse) mapping to 4 B1.

SOURCE

ARHGEF39 (S-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ARHGEF39 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-163946 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ARHGEF39 (S-14) is recommended for detection of ARHGEF39 of mouse, rat and human 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 other ARHGEF39 family members.

Suitable for use as control antibody for ARHGEF39 siRNA (h): sc-92586, ARHGEF39 siRNA (m): sc-143237, ARHGEF39 shRNA Plasmid (h): sc-92586-SH, ARHGEF39 shRNA Plasmid (m): sc-143237-SH, ARHGEF39 shRNA (h) Lentiviral Particles: sc-92586-V and ARHGEF39 shRNA (m) Lentiviral Particles: sc-143237-V.

Molecular Weight of ARHGEF39: 38 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 or our catalog for detailed protocols and support products.