

R9AP (S-12): sc-169080

BACKGROUND

R9AP, also known as RGS9BP (regulator of G-protein signaling 9-binding protein), is a 235 amino acid single-pass type IV membrane protein that belongs to the RGS7BP/RGS9BP family. R9AP has a C-terminal transmembrane domain that functions as the membrane anchor for the other largely soluble interacting partners, such as photoreceptor GTPase accelerating protein RGS9-1. R9AP mRNA has been detected only in retina, and the protein only in photoreceptors. R9AP is encoded by one intronless gene in both human and mouse. Defects in the R9AP gene are a cause of prolonged electroretinal response suppression (PERRS), also known as bradyopsia. PERRS is characterized by difficulty adjusting to sudden changes in luminance levels mediated by cones. The R9AP gene is conserved in chimpanzee, dog, cow, mouse, rat, chicken and zebrafish, and maps to human chromosome 19q13.11.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: RGS9BP (human) mapping to 19q13.11; Rgs9bp (mouse) mapping to 7 B2.

SOURCE

R9AP (S-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a cytoplasmic domain of R9AP of human origin.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

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-169080 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

R9AP (S-12) is recommended for detection of R9AP 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).

Suitable for use as control antibody for R9AP siRNA (h): sc-97282, R9AP siRNA (m): sc-152624, R9AP shRNA Plasmid (h): sc-97282-SH, R9AP shRNA Plasmid (m): sc-152624-SH, R9AP shRNA (h) Lentiviral Particles: sc-97282-V and R9AP shRNA (m) Lentiviral Particles: sc-152624-V.

Molecular Weight of R9AP: 25 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.

PROTOCOLS

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