

RGR (T-13): sc-160727

BACKGROUND

RGR (retinal G protein-coupled receptor), also known as RP44, is a 291 amino acid multi-pass membrane protein and rhodopsin homolog that functions as a receptor for all-*trans*- and 11-*cis*-retinal. Existing as three alternatively spliced isoforms, RGR is specifically expressed in tissue adjacent to retinal pigment epithelium, Mueller cells and retinal photoreceptor cells, and belongs to the G protein-coupled receptor 1 family and Opsin subfamily. RGR is suggested to play a role in vision, and defects in the gene encoding RGR are linked to the development of autosomal recessive retinitis pigmentosa (ARRP). Resulting in degeneration of retinal photoreceptor cells, patients with ARRP usually suffer from night vision blindness and eventually lose far peripheral visual field and central vision.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Rgr (mouse) mapping to 14 B.

SOURCE

RGR (T-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of RGR of mouse 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-160727 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

RGR (T-13) is recommended for detection of RGR of mouse and rat 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).

RGR (T-13) is also recommended for detection of RGR in additional species, including bovine.

Suitable for use as control antibody for RGR siRNA (m): sc-152839, RGR shRNA Plasmid (m): sc-152839-SH and RGR shRNA (m) Lentiviral Particles: sc-152839-V.

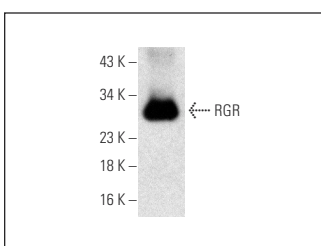
Molecular Weight of RGR: 32 kDa.

Positive Controls: mouse skeletal muscle extract: sc-364250.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



RGR (T-13): sc-160727. Western blot analysis of RGR expression in mouse skeletal muscle tissue extract.

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.