

GRF-1 (C-14): sc-131534

BACKGROUND

The glucocorticoid receptor (GR) is a ligand-dependent, transactivating regulatory protein that is a member of the nuclear receptor superfamily. GRF-1 (glucocorticoid receptor DNA-binding factor 1), also known as p190RhoGAP or simply p190, is a transcriptional regulator which binds to the promoter region of the glucocorticoid receptor gene and represses its expression. By repressing GR expression, GRF-1 acts to down-regulate Rho signaling, thereby mediating both actin cytoskeletal rearrangements and cell cycle events. Through its GAP domain, GRF-1 is thought to affect cytokinesis by regulating Rho activity; a regulation that is controlled by the ubiquitination of the GTP binding region and subsequent degradation of GRF-1. Additionally, GRF-1 plays an important role in oligodendrocyte differentiation, a process that is absent in malignant glioma tumors, implicating GRF-1 as a possible tumor suppressor. GRF-1 expression is regulated by glucocorticoids and the expressed protein exists as two isoforms produced by alternative splicing events.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: GRLF1 (human) mapping to 19q13.32; Grlf1 (mouse) mapping to 7 A2.

RESEARCH USE

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

SOURCE

GRF-1 (C-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of GRF-1 of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-131534 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

GRF-1 (C-14) is recommended for detection of GRF-1 isoforms 1 and 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).

GRF-1 (C-14) is also recommended for detection of GRF-1 isoforms 1 and 2 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for GRF-1 siRNA (h): sc-97682, GRF-1 siRNA (m): sc-41706, GRF-1 shRNA Plasmid (h): sc-97682-SH, GRF-1 shRNA Plasmid (m): sc-41706-SH, GRF-1 shRNA (h) Lentiviral Particles: sc-97682-V and GRF-1 shRNA (m) Lentiviral Particles: sc-41706-V.

Molecular Weight of GRF-1: 190 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.