SANTA CRUZ BIOTECHNOLOGY, INC.

MRGF (N-14): sc-138444

BACKGROUND

MRGF (MAS-related GPR, member F), also known as RTA, PSEC0142, GPR140 (G-protein coupled receptor 140) or GPR168 (G-protein coupled receptor 168), is a 343 amino acid multi-pass membrane protein that functions as an orphan receptor. MRGF belongs to the G-protein coupled receptor 1 family and Mas subfamily, and is thought to have a role in pain sensation and modulation by regulating nociceptor function. The gene encoding MRGF maps to human chromosome 11, which houses over 1,400 genes and comprises nearly 4% of the human genome. Jervell and Lange-Nielsen syndrome, Jacobsen syndrome, Niemann-Pick disease, hereditary angioedema and Smith-Lemli-Opitz syndrome are associated with defects in genes that map to chromosome 11.

REFERENCES

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4. Jira, P.E., et al. 2003. Smith-Lemli-Opitz syndrome and the DHCR7 gene. Ann. Hum. Genet. 67: 269-280.
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6. Siem, G., et al. 2008. Jervell and Lange-Nielsen syndrome in Norwegian children: aspects around cochlear implantation, hearing, and balance. Ear Hear. 29: 261-269.
7. Bhuiyan, Z.A., et al. 2008. An intronic mutation leading to incomplete skipping of exon-2 in KCNQ1 rescues hearing in Jervell and Lange-Nielsen syndrome. Prog. Biophys. Mol. Biol. 98: 319-327.
8. Coldren, C.D., et al. 2009. Chromosomal microarray mapping suggests a role for BSX and Neurogranin in neurocognitive and behavioral defects in the 11q terminal deletion disorder (Jacobsen syndrome). Neurogenetics 10: 89-95.

CHROMOSOMAL LOCATION

Genetic locus: MRGPRF (human) mapping to 11q13.3; Mrgprf (mouse) mapping to 7 F5.

SOURCE

MRGF (N-14) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an N-terminal extracellular domain of MRGF of human origin.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-138444 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

MRGF (N-14) is recommended for detection of MRGF of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

MRGF (N-14) is also recommended for detection of MRGF in additional species, including equine, canine and bovine.

Suitable for use as control antibody for MRGF siRNA (h): sc-96694, MRGF siRNA (m): sc-149571, MRGF shRNA Plasmid (h): sc-96694-SH, MRGF shRNA Plasmid (m): sc-149571-SH, MRGF shRNA (h) Lentiviral Particles: sc-96694-V and MRGF shRNA (m) Lentiviral Particles: sc-149571-V.

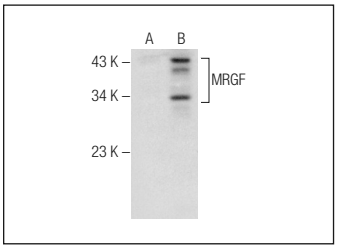
Molecular Weight of MRGF: 38 kDa.

Positive Controls: MRGF (h): 293T Lysate: sc-112769.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



MRGF (N-14): sc-138444. Western blot analysis of MRGF expression in non-transfected: sc-117752 (**A**) and human MRGF transfected: sc-112769 (**B**) 293T whole cell lysates.

RESEARCH USE

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