

MRGX2 (N-17): sc-69586

BACKGROUND

Mas-related G protein-coupled receptor member X1 (MRGX) is a sensory neuron-specific G protein-coupled receptor that is involved in the development and function of nociceptive neurons and may also regulate the sensation or modulation of pain. There are four members of the human MRGX family, designated MRGX1-4. MRGX2 (Mas-related G protein-coupled receptor member X2), also known as MRGPRX2, is a 330 amino acid multi-pass membrane protein that functions as an orphan receptor and, like MRGX, is thought to be involved in the function of nociceptive neurons. Expressed in the central nervous system with highest expression in dorsal root ganglia, MRGX2 may also be involved in cortistatin function, possibly playing a role in sleep regulation and cortical function.

REFERENCES

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- Takeda, S., et al. 2002. Identification of G protein-coupled receptor genes from the human genome sequence. *FEBS Lett.* 520: 97-101.
- Robas, N., et al. 2003. MRGX2 is a high potency cortistatin receptor expressed in dorsal root ganglion. *J. Biol. Chem.* 278: 44400-44404.
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- Nothacker, H.P., et al. 2005. Proadrenomedullin N-terminal peptide and cortistatin activation of MRGX2 receptor is based on a common structural motif. *Eur. J. Pharmacol.* 519: 191-193.

CHROMOSOMAL LOCATION

Genetic locus: MRGPRX2 (human) mapping to 11p15.1.

SOURCE

MRGX2 (N-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an N-terminal extracellular domain of MRGX2 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.

PROTOCOLS

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

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-69586 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

MRGX2 (N-17) is recommended for detection of MRGX2 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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).

Suitable for use as control antibody for MRGX2 siRNA (h): sc-75823, MRGX2 shRNA Plasmid (h): sc-75823-SH and MRGX2 shRNA (h) Lentiviral Particles: sc-75823-V.

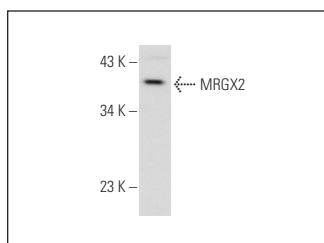
Molecular Weight of MRGX2: 37 kDa.

Positive Controls: SH-SY5Y cell lysate: sc-3812.

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



MRGX2 (N-17): sc-69586. Western blot analysis of MRGX2 expression in SH-SY5Y whole cell lysate.

RESEARCH USE

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