

METRNL (E-12): sc-168581

BACKGROUND

Meteorin, also known as METRN or RJD6, is a secreted protein belonging to the meteorin family that contains 293 amino acids and promotes axonal extension, axonal network formation and regulates glial cell differentiation. Glia are the most numerous cells in the brain and are essential in the nervous system. Meteorin is expressed in radial glia and undifferentiated neural progenitors of the central and peripheral nervous system. METRNL (meteorin-like protein), also known as glial cell differentiation regulator-like, is a 311 amino acid secreted protein belonging to the meteorin family and may have similar roles to that of the meteorin protein. METRNL is encoded by a gene located on human chromosome 17, which comprises over 2.5% of the human genome and encodes over 1,200 genes, some of which are involved in tumor suppression and in the pathogenesis of Li-Fraumeni syndrome, early onset breast cancer and a predisposition to cancers of the ovary, colon, prostate gland and fallopian tubes.

REFERENCES

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- Park, J.A., et al. 2008. Meteorin regulates angiogenesis at the gliovascular interface. *Glia* 56: 247-258.
- Shlien, A., et al. 2008. Excessive genomic DNA copy number variation in the Li-Fraumeni cancer predisposition syndrome. *Proc. Natl. Acad. Sci. USA* 105: 11264-11269.
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CHROMOSOMAL LOCATION

Genetic locus: METRNL (human) mapping to 17q25.3; Metrnl (mouse) mapping to 11 E2.

SOURCE

METRNL (E-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of METRNL of human 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-168581 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

METRNL (E-12) is recommended for detection of METRNL of mouse, rat and human 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).

METRNL (E-12) is also recommended for detection of METRNL in additional species, including equine, bovine and porcine.

Suitable for use as control antibody for METRNL siRNA (h): sc-93953, METRNL siRNA (m): sc-149378, METRNL shRNA Plasmid (h): sc-93953-SH, METRNL shRNA Plasmid (m): sc-149378-SH, METRNL shRNA (h) Lentiviral Particles: sc-93953-V and METRNL shRNA (m) Lentiviral Particles: sc-149378-V.

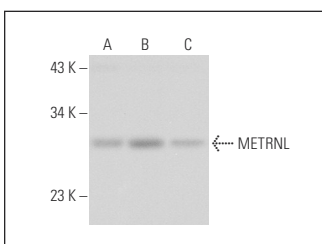
Molecular Weight of METRNL: 34 kDa.

Positive Controls: mouse testis extract: sc-2405, mouse brain extract: sc-2253 or HEK293 whole cell lysate: sc-45136.

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



METRNL (E-12): sc-168581. Western blot analysis of METRNL expression in mouse testis (A) and mouse brain (B) tissue extracts and HEK293 whole cell lysate (C).

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.