SANTA CRUZ BIOTECHNOLOGY, INC.

MENTHO (V-14): sc-243454

BACKGROUND

MENTHO, also known as STARD3NL (STARD3 N-terminal like) or MLN64 N-terminal domain homolog, is a 234 amino acid multi-pass membrane protein of the late endosome that contains one MENTAL domain and exists as 2 alternatively spliced isoforms. The gene encoding MENTHO maps to human chromosome 7, which houses over 1,000 genes and comprises nearly 5% of the human genome. Chromosome 7 has been linked to osteogenesis imperfecta, Pendred syndrome, lissencephaly, citrullinemia and Shwachman-Diamond syndrome. The deletion of a portion of the q arm of chromosome 7 is associated with Williams-Beuren syndrome, a condition characterized by mild mental retardation, an unusual comfort and friendliness with strangers and an elfin appearance. Deletions of portions of the q arm of chromosome 7 are associated with a number of myeloid disorders including cases of acute myelogenous leukemia and myelodysplasia.

REFERENCES

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3. Iwasaki, S., et al. 2001. Long-term audiological feature in Pendred syndrome caused by PDS mutation. Arch. Otolaryngol. Head Neck Surg. 127: 705-708.
4. Alpy, F., et al. 2002. MENTHO, a MLN64 homologue devoid of the START domain. J. Biol. Chem. 277: 50780-50787.
5. Osborne, L.R., et al. 2006. Williams-Beuren syndrome diagnosis using fluorescence *in situ* hybridization. Methods Mol. Med. 126: 113-128.
6. Reiner, O., et al. 2006. Lissencephaly 1 linking to multiple diseases: mental retardation, neurodegeneration, schizophrenia, male sterility, and more. Neuromolecular Med. 8: 547-565.
7. Gilbert-Dussardier, B. 2006. Williams-Beuren syndrome. Rev. Prat. 56: 2102-2106.
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CHROMOSOMAL LOCATION

Genetic locus: STARD3NL (human) mapping to 7p14.1; Stard3nl (mouse) mapping to 13 A2.

SOURCE

MENTHO (V-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of MENTHO 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 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-243454 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

MENTHO (V-14) is recommended for detection of MENTHO 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).

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

Suitable for use as control antibody for MENTHO siRNA (h): sc-89523, MENTHO siRNA (m): sc-149369, MENTHO shRNA Plasmid (h): sc-89523-SH, MENTHO shRNA Plasmid (m): sc-149369-SH, MENTHO shRNA (h) Lentiviral Particles: sc-89523-V and MENTHO shRNA (m) Lentiviral Particles: sc-149369-V.

Molecular Weight of MENTHO isoforms: 27/26 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.

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.