

MALL (E-13): sc-168540

BACKGROUND

MAL (myelin and lymphocyte protein), also known as T lymphocyte maturation-associated protein, is a nonglycosylated hydrophobic integral membrane protein belonging to the Myelin and lymphocyte (MAL) family of proteolipids. MAL is highly enriched in nervous system myelin and in rafts and apical membranes of epithelial cells. It is involved in forming, stabilizing and maintaining glycosphingolipid-enriched membrane microdomains. MALL (mal, T-cell differentiation protein-like), also known as BENE, is a 153 amino acid multi-pass membrane protein that belongs to the MAL family and contains one MARVEL domain. The gene encoding MALL maps to human chromosome 2, which consists of 237 million bases, encodes over 1,400 genes and makes up approximately 8% of the human genome. A number of genetic diseases are linked to genes on chromosome 2 including Harlequin ichthyosis, sitosterolemia and Alström syndrome.

REFERENCES

1. Schaeren-Wiemers, N., et al. 1995. Identification of new oligodendrocyte- and myelin-specific genes by a differential screening approach. *J. Neurochem.* 65: 10-22.
2. Zumsteg, U., et al. 2000. Alstrom syndrome: confirmation of linkage to chromosome 2p12-13 and phenotypic heterogeneity in three affected sibs. *J. Med. Genet.* 37: E8.
3. Shulenin, S., et al. 2001. An ATP-binding cassette gene (ABCG5) from the ABCG (White) gene subfamily maps to human chromosome 2p21 in the region of the Sitosterolemia locus. *Cytogenet. Cell Genet.* 92: 204-208.
4. Schaeren-Wiemers, N., et al. 2004. The raft-associated protein MAL is required for maintenance of proper axon—glia interactions in the central nervous system. *J. Cell Biol.* 166: 731-742.
5. Saravanan, K., et al. 2004. Specific downregulation and mistargeting of the lipid raft-associated protein MAL in a glycolipid storage disorder. *Neurobiol. Dis.* 16: 396-406.
6. Marazuela, M., et al. 2004. Expression of MAL and MAL2, two elements of the protein machinery for raft-mediated transport, in normal and neoplastic human tissue. *Histol. Histopathol.* 19: 925-933.
7. Philippar, U., et al. 2004. The SRF target gene Fhl2 antagonizes RhoA/MAL-dependent activation of SRF. *Mol. Cell* 16: 867-880.
8. Kelsell, D.P., et al. 2005. Mutations in ABCA12 underlie the severe congenital skin disease harlequin ichthyosis. *Am. J. Hum. Genet.* 76: 794-803.

CHROMOSOMAL LOCATION

Genetic locus: MALL (human) mapping to 2q13.

SOURCE

MALL (E-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of MALL 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-168540 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

MALL (E-13) is recommended for detection of MALL of 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).

Suitable for use as control antibody for MALL siRNA (h): sc-94392, MALL shRNA Plasmid (h): sc-94392-SH and MALL shRNA (h) Lentiviral Particles: sc-94392-V.

Molecular Weight of MALL: 17 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.