

MEMO1 (N-18): sc-83727

BACKGROUND

MEMO1 (mediator of cell motility 1), also known as C2orf4 or NS5ATP7, is a 297 amino acid protein that is thought to relax extracellular chemotactic signals that are targeted at the microtubule cytoskeleton, thereby controlling cell migration. Additionally, MEMO1 is thought to mediate Neu signaling and is required for breast carcinoma migration, suggesting an important role in tumorigenesis. The gene encoding MEMO1 maps to human chromosome 2, which houses over 1,400 genes and comprises nearly 8% of the human genome. Harlequin ichthyosis, a rare and morbid skin deformity, is associated with mutations in the chromosome 2-localized ABCA12 gene, while the lipid metabolic disorder sitosterolemia is associated with defects in the ABCG5 and ABCG8 genes, which also map to chromosome 2.

REFERENCES

- Cheng, N.C., Beitsma, M., Chan, A., Op den Camp, I., Westerveld, A., Pronk, J. and Versteeg, R. 1996. Lack of class I HLA expression in neuroblastoma is associated with high N-Myc expression and hypomethylation due to loss of the MEMO-1 locus. *Oncogene* 13: 1737-1744.
- McEvoy, C.R., Seshadri, R., Morley, A.A. and Firgaira, F.A. 2002. Frequency and genetic basis of MHC, β -2-microglobulin and MEMO-1 loss of heterozygosity in sporadic breast cancer. *Tissue Antigens* 60: 235-243.
- Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 611786. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
- McEvoy, C.R., Morley, A.A. and Firgaira, F.A. 2003. Evidence for whole chromosome 6 loss and duplication of the remaining chromosome in acute lymphoblastic leukemia. *Genes Chromosomes Cancer* 37: 321-325.
- Marone, R., Hess, D., Dankort, D., Muller, W.J., Hynes, N.E. and Badache, A. 2004. MEMO mediates ErbB2-driven cell motility. *Nat. Cell Biol.* 6: 515-522.

CHROMOSOMAL LOCATION

Genetic locus: MEMO1 (human) mapping to 2p23.1; Memo1 (mouse) mapping to 17 E2.

SOURCE

MEMO1 (N-18) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the N-terminus of MEMO1 of human origin.

PRODUCT

Each vial contains 100 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-83727 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

MEMO1 (N-18) is recommended for detection of MEMO1 of mouse, rat and 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).

MEMO1 (N-18) is also recommended for detection of MEMO1 in additional species, including bovine and avian.

Suitable for use as control antibody for MEMO1 siRNA (h): sc-106215, MEMO1 siRNA (m): sc-149368, MEMO1 shRNA Plasmid (h): sc-106215-SH, MEMO1 shRNA Plasmid (m): sc-149368-SH, MEMO1 shRNA (h) Lentiviral Particles: sc-106215-V and MEMO1 shRNA (m) Lentiviral Particles: sc-149368-V.

Molecular Weight (predicted) of MEMO1: 34 kDa.

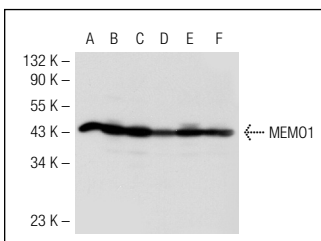
Molecular Weight (observed) of MEMO1: 43 kDa.

Positive Controls: HEK293 whole cell lysate: sc-45136, SK-MEL-28 cell lysate: sc-2236 or A-375 cell lysate: sc-3811.

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



MEMO1 (N-18): sc-83727. Western blot analysis of MEMO1 expression in HEK293 (A), HT-1080 (B), OV-90 (C), NTERA-2 cl.D1 (D), SK-MEL-28 (E) and A-375 (F) whole cell lysates.

RESEARCH USE

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