SANTA CRUZ BIOTECHNOLOGY, INC.

MIC1 (D-7): sc-390305

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

MIC1, also known as C18orf8, is a 657 amino acid protein that contains one MIC1 domain and is encoded by a gene which maps to human chromosome 18. Chromosome 18 houses over 300 protein-coding genes and contains nearly 76 million bases. There are a variety of diseases associated with defects in chromosome 18-localized genes, some of which include Trisomy 18 (also known as Edwards syndrome), Niemann-Pick disease, hereditary hemorrhagic telangiectasia, erythropoietic protoporphyria and follicular lymphomas.

REFERENCES

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4. Grosso, S., et al. 2005. Chromosome 18 aberrations and epilepsy: a review. Am. J. Med. Genet. A 134A: 88-94.
5. Aurizi, C., et al. 2007. Heterogeneity of mutations in the ferrochelatase gene in Italian patients with erythropoietic protoporphyria. Mol. Genet. Metab. 90: 402-407.
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7. Kamal, A.H. and Prakash, U.B. 2007. Hereditary hemorrhagic telangiectasia. Mayo Clin. Proc. 82: 1364.
8. Shovlin, C.L., et al. 2007. Elevated factor VIII in hereditary haemorrhagic telangiectasia (HHT): association with venous thromboembolism. Thromb. Haemost. 98: 1031-1039.

CHROMOSOMAL LOCATION

Genetic locus: C18orf8 (human) mapping to 18q11.2; 3110002H16Rik (mouse) mapping to 18 A1.

SOURCE

MIC1 (D-7) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 613-645 near the C-terminus of MIC1 of human origin.

PRODUCT

Each vial contains 200 µg IgM kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-390305 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

STORAGE

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

APPLICATIONS

MIC1 (D-7) is recommended for detection of MIC1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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), immunohistochemistry (including paraffin-embedded sections) (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 MIC1 siRNA (h): sc-75782, MIC1 siRNA (m): sc-149421, MIC1 shRNA Plasmid (h): sc-75782-SH, MIC1 shRNA Plasmid (m): sc-149421-SH, MIC1 shRNA (h) Lentiviral Particles: sc-75782-V and MIC1 shRNA (m) Lentiviral Particles: sc-149421-V.

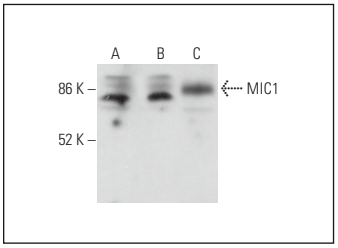
Molecular Weight of MIC1: 75 kDa.

Positive Controls: BJAB nuclear extract: sc-2145, Ramos nuclear extract: sc-2153 or NAMALWA cell lysate: sc-2234.

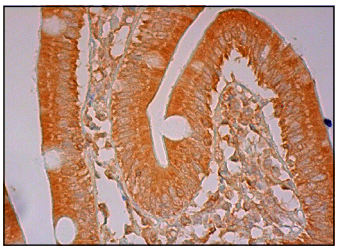
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein L-Agarose: sc-2336 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



MIC1 (D-7): sc-390305. Western blot analysis of MIC1 expression in BJAB (**A**) and Ramos (**B**) nuclear extracts and NAMALWA whole cell lysate (**C**).



MIC1 (D-7): sc-390305. Immunoperoxidase staining of formalin fixed, paraffin-embedded human small intestine tissue showing cytoplasmic staining of glandular cells.

RESEARCH USE

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

PROTOCOLS

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