SANTA CRUZ BIOTECHNOLOGY, INC.

MIC1 (G-19): sc-85062



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 18q11.2. 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

- Carstea, E.D., Polymeropoulos, M.H., Parker, C.C., Detera-Wadleigh, S.D., O'Neill, R.R., Patterson, M.C., Goldin, E., Xiao, H., Straub, R.E., Vanier, M.T., et al. 1993. Linkage of Niemann-Pick disease type C to human chromosome 18. Proc. Natl. Acad. Sci. USA 90: 2002-2004.
- Petek, E., Pertl, B., Tschernigg, M., Bauer, M., Mayr, J., Wagner, K. and Kroisel, P.M. 2003. Characterisation of a 19-year-old "long-term survivor" with Edwards syndrome. Genet. Couns. 14: 239-244.
- Raghavan, S.C., Swanson, P.C., Wu, X., Hsieh, C.L. and Lieber, M.R. 2004. A non-B-DNA structure at the Bcl-2 major breakpoint region is cleaved by the RAG complex. Nature 428: 88-93.
- Grosso, S., Pucci, L., Di Bartolo, R.M., Gobbi, G., Bartalini, G., Anichini, C., Scarinci, R., Balestri, M., Farnetani, M.A., Cioni, M., Morgese, G. and Balestri, P. 2005. Chromosome 18 aberrations and epilepsy: a review. Am. J. Med. Genet. A 134: 88-94.
- Aurizi, C., Schneider-Yin, X., Sorge, F., Macrì, A., Minder, E.I. and Biolcati, G. 2007. Heterogeneity of mutations in the ferrochelatase gene in Italian patients with erythropoietic protoporphyria. Mol. Genet. Metab. 90: 402-407.
- Broderick, P., Carvajal-Carmona, L., Pittman, A.M., Webb, E., Howarth, K., Rowan, A., Lubbe, S., Spain, S., Sullivan, K., Fielding, S., Jaeger, E., Vijayakrishnan, J., Kemp, Z., Gorman, M., Chandler, I., Papaemmanuil, E., Penegar, S., Wood, W., Sellick, G., et al. 2007. A genome-wide association study shows that common alleles of SMAD7 influence colorectal cancer risk. Nat. Genet. 39: 1315-1317.
- 7. Kamal, A.H. and Prakash, U.B. 2007. Hereditary hemorrhagic telangiectasia. Mayo Clin. Proc. 82: 1364.
- Shovlin, C.L., Sulaiman, N.L., Govani, F.S., Jackson, J.E. and Begbie, M.E. 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 (G-19) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of MIC1 of human origin.

PRODUCT

Each vial contains 100 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-85062 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

MIC1 (G-19) is recommended for detection of MIC1 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); non cross-reactive with MIC2, MICA, and MICB.

MIC1 (G-19) is also recommended for detection of MIC1 in additional species, including equine, canine and bovine.

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.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunofluo-rescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz[™] Mounting Medium: sc-24941.

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.

PROTOCOLS

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

MONOS Satisfation Guaranteed Try **MIC1 (D-7): sc-390305**, our highly recommended monoclonal alternative to MIC1 (G-19).