SANTA CRUZ BIOTECHNOLOGY, INC.

MORF4L2 (h): 293T Lysate: sc-116601

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The Power to Question

BACKGROUND

The MORF-related genes on chromosomes X (MRGX, also known as MORF4L) proteins are members of the mortality factor (MORF) family of transcriptional regulators that are involved in cell growth, regulation, and senescence. MORF4L2 is a 288 amino acid transcription factor that is expressed ubiquitously in all vertebrates. MORF4L2 localizes to the nucleus, and it has a protein kinase C phosphorylation site as well as a tyrosine phosphorylation site. MORF4L2 interacts with the Rb tumor suppressor through its helix-loop-helix and leucine zipper regions. MORF4L2 has histone deacetylase activity and can either repress or promote the activity of the B-Myb promoter depending on the tissue. Unlike other MORF related proteins, overexpression of MORF4L2 does not lead to abnormal nuclear morphology or cell death.

REFERENCES

1. Nomura, N., et al. 1995. Prediction of the coding sequences of unidentified human genes. I. The coding sequences of 40 new genes (KIAA0001-KIAA0040) deduced by analysis of randomly sampled cDNA clones from human immature myeloid cell line KG-1. DNA Res. 1: 27-35.
2. Bertram, M.J., et al. 1999. Identification of a gene that reverses the immortal phenotype of a subset of cells and is a member of a novel family of transcription factor-like genes. Mol. Cell. Biol. 19: 1479-1485.
3. Yochum, G.S. and Ayer, D.E. 2002. Role for the mortality factors MORF4, MRGX, and MRG15 in transcriptional repression via associations with Pf1, mSin3A, and transducin-like enhancer of split. Mol. Cell. Biol. 22: 7868-7876.
4. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 300409. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
5. Tominaga, K., et al. 2003. MRGX is a novel transcriptional regulator that exhibits activation or repression of the B-Myb promoter in a cell type-dependent manner. J. Biol. Chem. 278: 49618-49624.
6. Tominaga, K., et al. 2005. MRGX is not essential for cell growth and development in the mouse. Mol. Cell. Biol. 25: 4873-4880.
7. Burstein, E.S., et al. 2006. Characterization of the Mas-related gene family: structural and functional conservation of human and rhesus MRGX receptors. Br. J. Pharmacol. 147: 73-82.

CHROMOSOMAL LOCATION

Genetic locus: MORF4L2 (human) mapping to Xq22.2.

PRODUCT

MORF4L2 (h): 293T Lysate represents a lysate of human MORF4L2 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

APPLICATIONS

MORF4L2 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive MORF4L2 antibodies. Recommended use: 10-20 µl per lane.

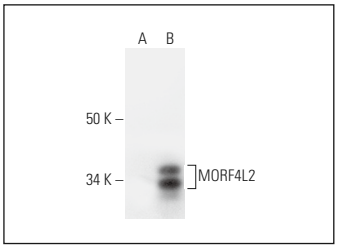
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

MORF4L1/2 (E-2): sc-393208 is recommended as a positive control antibody for Western Blot analysis of enhanced human MORF4L2 expression in MORF4L2 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

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.

DATA



MORF4L1/2 (E-2): sc-393208. Western blot analysis of MORF4L2 expression in non-transfected: sc-117752 (**A**) and human MORF4L2 transfected: sc-116601 (**B**) 293T whole cell lysates.

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.