

MORF4L1 (m2): 293T Lysate: sc-121745

BACKGROUND

The members of the mortality factor family include mortality factor 4 (MORF4), MORF4L1 (also known as MRG15) and MORF4-related gene X (MRGX). The human MORF4 gene maps to chromosome 4q34.1. MORF4 induces a senescent-like phenotype in complementation group B immortal cell lines. The genes encoding MRG15 and MRGX map to chromosomes 15q24 and Xq22, respectively. MORF4, MORF4L1 and MRGX each contain a C-terminal leucine zipper. An association between MORF4L1, Rb (retinoblastoma tumor suppressor) and PAM14 (protein associated with MORF4L1) suggests a role for MORF4L1 in transcription regulation. MORF4L1 also associates with the histone acetyl transferase MOF. In addition, MORF4 and MRGX interact with mSin3A and TLE (transducin-like enhancer of split). The MORF/mSin3A/TLE association may repress transcription. In Purkinje cells, MORF4L1 localizes to the dendrites and the nuclei.

REFERENCES

- 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.
- Leung, J.K., et al. 2001. MRG15 activates the B-Myb promoter through formation of a nuclear complex with the retinoblastoma protein and the novel protein PAM14. *J. Biol. Chem.* 276: 39171-39178.
- Pardo, P.S., et al. 2002. MRG15, a novel chromodomain protein, is present in two distinct multiprotein complexes involved in transcriptional activation. *J. Biol. Chem.* 277: 50860-50866.
- 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.
- Matsuoka, Y., et al. 2002. A chromodomain-containing nuclear protein, MRG15 is expressed as a novel type of dendritic mRNA in neurons. *Neurosci. Res.* 42: 299-308.

CHROMOSOMAL LOCATION

Genetic locus: Morf4l1 (mouse) mapping to 9 E3.1.

PRODUCT

MORF4L1 (m2): 293T Lysate represents a lysate of mouse MORF4L1 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.

PROTOCOLS

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

APPLICATIONS

MORF4L1 (m2): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive MORF4L1 antibodies. Recommended use: 10-20 µl per lane.

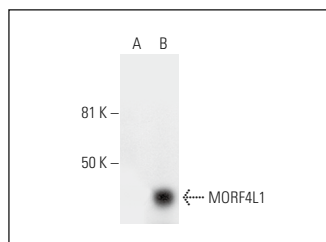
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

MORF4L1/2 (E-2): sc-393208 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse MORF4L1 expression in MORF4L1 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 MORF4L1 expression in non-transfected: sc-117752 (A) and mouse MORF4L1 transfected: sc-121745 (B) 293T whole cell lysates.

RESEARCH USE

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