

MORF4L1 (H-51): sc-366023

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 15q25.1 and Xq22.2, 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., et al. 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 (human) mapping to 15q25.1; Morf4l1 (mouse) mapping to 9 E3.1.

SOURCE

MORF4L1 (H-51) is a rabbit polyclonal antibody raised against amino acids 1-51 mapping at the N-terminus of MORF4L1 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

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

APPLICATIONS

MORF4L1 (H-51) is recommended for detection of MORF4L1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

MORF4L1 (H-51) is also recommended for detection of MORF4L1 in additional species, including bovine, porcine and avian.

Suitable for use as control antibody for MORF4L1 siRNA (h): sc-38045, MORF4L1 siRNA (m): sc-38046, MORF4L1 shRNA Plasmid (h): sc-38045-SH, MORF4L1 shRNA Plasmid (m): sc-38046-SH, MORF4L1 shRNA (h) Lentiviral Particles: sc-38045-V and MORF4L1 shRNA (m) Lentiviral Particles: sc-38046-V.

Molecular Weight of MORF4L1: 41/37/27 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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: 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.

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.