MRFAP1 (L-13): sc-136758



The Power to Question

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 4q33-q34.1. MORF4 induces a senescent-like phenotype in complementation group B immortal cell lines. MORF4 family-associated protein 1 (MRFAP1), also known as GAM14 or PGR1, is a 127 amino acid member of the MORF4 family-associated protein family. Localized to nucleus and cytoplasm, MRFAP1 colocalizes with MORF4L1 to the cell nuclei. Its association with MORF4L1 and Rb1 suggests that MRFAP1 may play a role in transcription regulation. The gene encoding human MRFAP1 maps to chromosome 4p16.1.

REFERENCES

- Leung, J.K., Berube, N., Venable, S., Ahmed, S., Timchenko, N. and Pereira-Smith, O.M. 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.
- 2. Pardo, P.S., Leung, J.K., Lucchesi, J.C. and Pereira-Smith, O.M. 2002. MRG15, a novel chromodomain protein, is present in two distinct multiprotein complexes involved in transcriptional activation. J. Biol. Chem. 277: 50860-50866.
- Tominaga, K., Leung, J.K., Rookard, P., Echigo, J., Smith, J.R. and Pereira-Smith, O.M. 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.
- Tominaga, K., Magee, D.M., Matzuk, M.M. and Pereira-Smith, O.M. 2004.
 PAM14, a novel MRG- and Rb-associated protein, is not required for development and T cell function in mice. Mol. Cell. Biol. 24: 8366-8373.
- Piras, A.M., Nikkola, L., Chiellini, F., Ashammakhi, N. and Chiellini, E. 2006. Development of diclofenac sodium releasing bio-erodible polymeric nanomats. J. Nanosci. Nanotechnol. 6: 3310-3320.
- Zhang, P., Zhao, J., Wang, B., Du, J., Lu, Y., Chen, J. and Ding, J. 2006. The MRG domain of human MRG15 uses a shallow hydrophobic pocket to interact with the N-terminal region of PAM14. Protein Sci. 15: 2423-2434.
- Bowman, B.R., Moure, C.M., Kirtane, B.M., Welschhans, R.L., Tominaga, K., Pereira-Smith, O.M. and Quiocho, F.A. 2006. Multipurpose MRG domain involved in cell senescence and proliferation exhibits structural homology to a DNA-interacting domain. Structure 14: 151-158.

CHROMOSOMAL LOCATION

Genetic locus: MRFAP1 (human) mapping to 4p16.1.

STORAGE

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

PROTOCOLS

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

SOURCE

MRFAP1 (L-13) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of MRFAP1 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-136758 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

MRFAP1 (L-13) is recommended for detection of MRFAP1 of human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with MRFAP1L1.

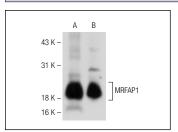
Suitable for use as control antibody for MRFAP1 siRNA (h): sc-89303, MRFAP1 shRNA Plasmid (h): sc-89303-SH and MRFAP1 shRNA (h) Lentiviral Particles: sc-89303-V.

Molecular Weight of MRFAP1: 14 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.

DATA



MRFAP1 (L-13): sc-136758. Western blot analysis of MRFAP1 expression in mouse prostate (**A**) and mouse brain (**B**) tissue extracts.

RESEARCH USE

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