

MRFAP1 (P-12): sc-136760

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

1. 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 multi-protein complexes involved in transcriptional activation. *J. Biol. Chem.* 277: 50860-50866.
3. 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.
4. 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.
5. 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.
6. 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.

CHROMOSOMAL LOCATION

Genetic locus: Mrfap1 (mouse) mapping to 5 B3.

SOURCE

MRFAP1 (P-12) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of MRFAP1 of mouse origin.

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.

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-136760 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

MRFAP1 (P-12) is recommended for detection of MRFAP1 of mouse and rat origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunoprecipitation [1-2 µg per 100-500 µg 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 .

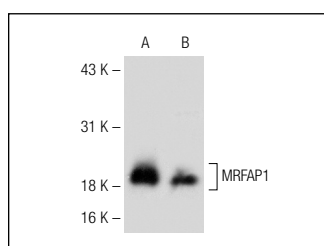
Suitable for use as control antibody for MRFAP1 siRNA (m): sc-149553, MRFAP1 shRNA Plasmid (m): sc-149553-SH and MRFAP1 shRNA (m) Lentiviral Particles: sc-149553-V.

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 (P-12): sc-136760. Western blot analysis of MRFAP1 expression in mouse prostate (A) and mouse brain (B) tissue extracts.

PROTOCOLS

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