



**SZABO  
SCANDIC**

Part of Europa Biosite

## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!  
See the following pages for more information!



### Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

### SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

[mail@szabo-scandic.com](mailto:mail@szabo-scandic.com)

[www.szabo-scandic.com](http://www.szabo-scandic.com)

[linkedin.com/company/szaboscandic](http://linkedin.com/company/szaboscandic)



# MRFAP1 siRNA (m): sc-149553

## 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. 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.
7. 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.
8. Filipec Kanizaj, T., Katicic, M., Skurla, B., Ticak, M., Plecko, V. and Kalenic, S. 2009. Helicobacter pylori eradication therapy success regarding different treatment period based on clarithromycin or metronidazole triple-therapy regimens. *Helicobacter* 14: 29-35.

## CHROMOSOMAL LOCATION

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.

## PRODUCT

MRFAP1 siRNA (m) is a target-specific 19-25 nt siRNA designed to knock down gene expression. Each vial contains 3.3 nmol of lyophilized siRNA, sufficient for a 10 µM solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see MRFAP1 shRNA Plasmid (m): sc-149553-SH and MRFAP1 shRNA (m) Lentiviral Particles: sc-149553-V as alternate gene silencing products.

## STORAGE AND RESUSPENSION

Store lyophilized siRNA duplex at -20° C with desiccant. Stable for at least one year from the date of shipment. Once resuspended, store at -20° C, avoid contact with RNases and repeated freeze thaw cycles.

Resuspend lyophilized siRNA duplex in 330 µl of the RNase-free water provided. Resuspension of the siRNA duplex in 330 µl of RNase-free water makes a 10 µM solution in a 10 µM Tris-HCl, pH 8.0, 20 mM NaCl, 1 mM EDTA buffered solution.

## APPLICATIONS

MRFAP1 siRNA (m) is recommended for the inhibition of MRFAP1 expression in mouse cells.

## SUPPORT REAGENTS

For optimal siRNA transfection efficiency, Santa Cruz Biotechnology's siRNA Transfection Reagent: sc-29528 (0.3 ml), siRNA Transfection Medium: sc-36868 (20 ml) and siRNA Dilution Buffer: sc-29527 (1.5 ml) are recommended. Control siRNAs or Fluorescein Conjugated Control siRNAs are available as 10 µM in 66 µl. Each contain a scrambled sequence that will not lead to the specific degradation of any known cellular mRNA. Fluorescein Conjugated Control siRNAs include: sc-36869, sc-44239, sc-44240 and sc-44241. Control siRNAs include: sc-37007, sc-44230, sc-44231, sc-44232, sc-44233, sc-44234, sc-44235, sc-44236, sc-44237 and sc-44238.

## RT-PCR REAGENTS

Semi-quantitative RT-PCR may be performed to monitor MRFAP1 gene expression knockdown using RT-PCR Primer: MRFAP1 (m)-PR: sc-149553-PR (20 µl). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.

## RESEARCH USE

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