



# 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](https://www.linkedin.com/company/szaboscandic) 



# Ribosomal Protein L23 siRNA (m): sc-152903

## BACKGROUND

Ribosomes, the organelles that catalyze protein synthesis, are composed of a small subunit (40S) and a large subunit (60S) that consist of over 80 distinct ribosomal proteins. Mammalian ribosomal proteins are encoded by multigene families that contain processed pseudogenes and one functional intron-containing gene within their coding regions. Ribosomal Protein L23 (RPL23), also known as 60S Ribosomal Protein L17, is a 140 amino acid protein and component of the 60S subunit that belongs to the Ribosomal Protein L14P family. Localizing to cytoplasm, Ribosomal Protein L23 is suggested to promote multidrug resistance (MDR) in gastric cancer cells through suppression of drug-induced apoptosis. Like most ribosomal proteins, Ribosomal Protein L23 exists as multiple processed pseudogenes that are scattered throughout the genome.

## REFERENCES

- Berchtold, M.W. and Berger, M.C. 1991. Isolation and analysis of a human cDNA highly homologous to the yeast gene encoding L17A ribosomal protein. *Gene* 102: 283-288.
- Herault, Y., et al. 1991. cDNA and predicted amino acid sequences of the human ribosomal protein genes rpS12 and rpl17. *Nucleic Acids Res.* 19: 4001.
- Wool, I.G., et al. 1995. Structure and evolution of mammalian ribosomal proteins. *Biochem. Cell Biol.* 73: 933-947.
- Kenmochi, N., et al. 1998. A map of 75 human ribosomal protein genes. *Genome Res.* 8: 509-523.
- Dai, M.S. and Lu, H. 2004. Inhibition of MDM2-mediated p53 ubiquitination and degradation by Ribosomal Protein L5. *J. Biol. Chem.* 279: 44475-44482.
- Dai, M.S., et al. 2004. Ribosomal Protein L23 activates p53 by inhibiting MDM2 function in response to ribosomal perturbation but not to translation inhibition. *Mol. Cell. Biol.* 24: 7654-7668.
- Jin, A., et al. 2004. Inhibition of HDM2 and activation of p53 by Ribosomal Protein L23. *Mol. Cell. Biol.* 24: 7669-7680.
- Dai, M.S., et al. 2006. Regulation of the MDM2-p53 pathway by Ribosomal Protein L11 involves a post-ubiquitination mechanism. *J. Biol. Chem.* 281: 24304-24313.
- Online Mendelian Inheritance in Man, OMIM™. 2010. Johns Hopkins University, Baltimore, MD. MIM Number: 603662. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>

## CHROMOSOMAL LOCATION

Genetic locus: Rpl23 (mouse) mapping to 11 D.

## PRODUCT

Ribosomal Protein L23 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  $\mu$ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see Ribosomal Protein L23 shRNA Plasmid (m): sc-152903-SH and Ribosomal Protein L23 shRNA (m) Lentiviral Particles: sc-152903-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  $\mu$ l of the RNase-free water provided. Resuspension of the siRNA duplex in 330  $\mu$ l of RNase-free water makes a 10  $\mu$ M solution in a 10  $\mu$ M Tris-HCl, pH 8.0, 20 mM NaCl, 1 mM EDTA buffered solution.

## APPLICATIONS

Ribosomal Protein L23 siRNA (m) is recommended for the inhibition of Ribosomal Protein L23 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  $\mu$ M in 66  $\mu$ l. 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 Ribosomal Protein L23 gene expression knockdown using RT-PCR Primer: Ribosomal Protein L23 (m)-PR: sc-152903-PR (20  $\mu$ l). 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.

## PROTOCOLS

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