



# 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) 

# Siglec-15 siRNA (m): sc-153461

## BACKGROUND

Two families of mammalian lectin-like adhesion molecules, the selectins and the sialoadhesins, bind glycoconjugate ligands in a sialic acid-dependent manner. The sialic acid-binding immunoglobulin superfamily lectins, designated Siglecs or sialoadhesins, recognize sialylated ligands and play a key role in mediating sialic-acid dependent binding to cells. Siglec-15 (sialic acid binding Ig-like lectin 15), also known as CD33L3, is a 328 amino acid single-pass type I membrane protein that contains one Ig-like C2-type domain and one Ig-like V-type domain. Expressed in dendritic and macrophage cells, Sinlec-15 interacts with DAP10 and DAP12 and binds to sialylated glycoproteins. The gene encoding Siglec-15 maps to human chromosome 18, which houses over 300 protein-coding genes and contains nearly 76 million bases.

## REFERENCES

1. Crocker, P.R. 2002. Siglecs: sialic-acid-binding immunoglobulin-like lectins in cell-cell interactions and signalling. *Curr. Opin. Struct. Biol.* 12: 609-615.
2. Crocker, P.R. 2005. Siglecs in innate immunity. *Curr. Opin. Pharmacol.* 5: 431-437.
3. Angata, T. 2006. Molecular diversity and evolution of the Siglec family of cell-surface lectins. *Mol. Divers.* 10: 555-566.
4. Angata, T., Tabuchi, Y., Nakamura, K. and Nakamura, M. 2007. Siglec-15: an immune system Siglec conserved throughout vertebrate evolution. *Glycobiology* 17: 838-846.
5. Crocker, P.R., Paulson, J.C. and Varki, A. 2007. Siglecs and their roles in the immune system. *Nat. Rev. Immunol.* 7: 255-266.
6. von Gunten, S. and Bochner, B.S. 2008. Basic and clinical immunology of Siglecs. *Ann. N.Y. Acad. Sci.* 1143: 61-82.
7. Crocker, P.R. and Redelinghuys, P. 2008. Siglecs as positive and negative regulators of the immune system. *Biochem. Soc. Trans.* 36: 1467-1471.

## CHROMOSOMAL LOCATION

Genetic locus: Siglec15 (mouse) mapping to 18 E3.

## PRODUCT

Siglec-15 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 Siglec-15 shRNA Plasmid (m): sc-153461-SH and Siglec-15 shRNA (m) Lentiviral Particles: sc-153461-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

Siglec-15 siRNA (m) is recommended for the inhibition of Siglec-15 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 Siglec-15 gene expression knockdown using RT-PCR Primer: Siglec-15 (m)-PR: sc-153461-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.