



# 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 Handels GmbH

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) 

## Ly6G6d siRNA (m): sc-149167

### BACKGROUND

Members of the lymphocyte antigen 6 superfamily are cysteine-rich and are usually GPI-anchored cell surface proteins having immunologic roles. Most hematopoietic cells express one or more members of the Ly-6 superfamily. Well-studied members of this family include CD59, an inhibitor of the complement cascade, uPAR, which is involved in proteolysis of extracellular matrix proteins, and Lynx-1, a modulator of nicotinic acetylcholine receptors. Ly6G6d (lymphocyte antigen 6 complex locus protein G6d), also known as Megakaryocyte-enhanced gene transcript 1 protein, is a 133 amino acid membrane protein that contains one UPAR/Ly6 domain, which is about 80 proteins long and has a conserved pattern of 8 to 10 cysteine residues. Ly6G6d is expressed in fetal lung, brain, spleen and kidney, as well as adult lung. The gene encoding Ly6G6d maps within the human major histocompatibility complex class III region on chromosome 6p21.33.

### REFERENCES

- Albertella, M.R., Jones, H., Thomson, W., Olavesen, M.G. and Campbell, R.D. 1996. Localization of eight additional genes in the human major histocompatibility complex, including the gene encoding the casein kinase II  $\beta$  subunit (CSNK2B). *Genomics* 36: 240-251.
- Ribas, G., Neville, M., Wixon, J.L., Cheng, J. and Campbell, R.D. 1999. Genes encoding three new members of the leukocyte antigen 6 superfamily and a novel member of Ig superfamily, together with genes encoding the regulatory nuclear chloride ion channel protein (hRNCC) and an N  $\omega$ -N  $\omega$ -dimethylarginine dimethylaminohydrolase homologue, are found in a 30-kb segment of the MHC class III region. *J. Immunol.* 163: 278-287.
- Mallya, M., Campbell, R.D. and Aguado, B. 2002. Transcriptional analysis of a novel cluster of Ly-6 family members in the human and mouse major histocompatibility complex: five genes with many splice forms. *Genomics* 80: 113-123.
- Xie, T., Rowen, L., Aguado, B., Ahearn, M.E., Madan, A., Qin, S., Campbell, R.D. and Hood, L. 2003. Analysis of the gene-dense major histocompatibility complex class III region and its comparison to mouse. *Genome Res.* 13: 2621-2636.
- Mallya, M., Campbell, R.D. and Aguado, B. 2006. Characterization of the five novel Ly-6 superfamily members encoded in the MHC, and detection of cells expressing their potential ligands. *Protein Sci.* 15: 2244-2256.
- James, I., McKinnon, E., Gaudieri, S. and Morahan, G. 2009. Missingness in the T1DGC MHC fine-mapping SNP data: association with HLA genotype and potential influence on genetic association studies. *Diabetes Obes. Metab.* 11: 101-107.
- Online Mendelian Inheritance in Man, OMIM<sup>™</sup>. 2009. Johns Hopkins University, Baltimore, MD. MIM Number: 606038. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>

### CHROMOSOMAL LOCATION

Genetic locus: Ly6g6d (mouse) mapping to 17 B1.

### RESEARCH USE

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

### PRODUCT

Ly6G6d siRNA (m) is a pool of 2 target-specific 19-25 nt siRNAs 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 Ly6G6d shRNA Plasmid (m): sc-149167-SH and Ly6G6d shRNA (m) Lentiviral Particles: sc-149167-V as alternate gene silencing products.

For independent verification of Ly6G6d (m) gene silencing results, we also provide the individual siRNA duplex components. Each is available as 3.3 nmol of lyophilized siRNA. These include: sc-149167A and sc-149167B.

### 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

Ly6G6d siRNA (m) is recommended for the inhibition of Ly6G6d 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 Ly6G6d gene expression knockdown using RT-PCR Primer: Ly6G6d (m)-PR: sc-149167-PR (20  $\mu$ l). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.

### PROTOCOLS

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