



# SZABO SCANDIC

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## Produktinformation



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Diagnostik & molekulare Diagnostik



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### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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## PLP-J siRNA (m): sc-152334

### BACKGROUND

Members of the prolactin (PRL) protein family are expressed primarily in the uterus, placenta and anterior pituitary, and play a role in maternal-fetal adaptations to pregnancy. Prolactin plays a role in multiple processes, including cell growth, reproduction and immune function. In addition to its role in mammary development and lactation, Prolactin is known to play a role in the development of mammary cancer, acting as both a mitogen and a differentiating agent. PLP-J (placental prolactin-like protein J), also known as Prl3c1 (prolactin family 3, subfamily c, member 1) or Decidualin, is a 212 amino acid secreted protein that belongs to the somatotropin/prolactin family. Acting as a regulator of postimplantation intrauterine events, PLP-J also plays a role in the proliferation of uterine stromal cells and inhibited endothelial cell proliferation. PLP-J is expressed in maternal decidua, as opposed to other members of the PRL family, which are expressed primarily in placental trophoblasts.

### REFERENCES

1. Ishibashi, K. and Imai, M. 1999. Identification of four new members of the rat prolactin/growth hormone gene family. *Biochem. Biophys. Res. Commun.* 262: 575-578.
2. Toft, D.J. and Linzer, D.I. 1999. Prolactin (PRL)-like protein J, a novel member of the PRL/growth hormone family, is exclusively expressed in maternal decidua. *Endocrinology* 140: 5095-5101.
3. Dai, G., Wang, D., Liu, B., Kasik, J.W., Müller, H., White, R.A., Hummel, G.S. and Soares, M.J. 2000. Three novel paralogs of the rodent prolactin gene family. *J. Endocrinol.* 166: 63-75.
4. Alam, S.M., Konno, T., Sahgal, N., Lu, L. and Soares, M.J. 2008. Decidual cells produce a heparin-binding prolactin family cytokine with putative intrauterine regulatory actions. *J. Biol. Chem.* 283: 18957-18968.
5. Hayakawa, K., Nakanishi, M.O., Ohgane, J., Tanaka, S., Hirokawa, M., Soares, M.J., Yagi, S. and Shiota, K. 2012. Bridging sequence diversity and tissue-specific expression by DNA methylation in genes of the mouse prolactin superfamily. *Mamm. Genome* 23: 336-345.

### CHROMOSOMAL LOCATION

Genetic locus: Prl3c1 (mouse) mapping to 13 A3.1.

### PRODUCT

PLP-J siRNA (m) is a pool of 3 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 PLP-J shRNA Plasmid (m): sc-152334-SH and PLP-J shRNA (m) Lentiviral Particles: sc-152334-V as alternate gene silencing products.

For independent verification of PLP-J (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-152334A, sc-152334B and sc-152334C.

### PROTOCOLS

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

PLP-J siRNA (m) is recommended for the inhibition of PLP-J 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 PLP-J gene expression knockdown using RT-PCR Primer: PLP-J (m)-PR: sc-152334-PR (20  $\mu$ l, 460 bp). 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.