



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

www.szabo-scandic.com

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

IL-17D siRNA (m): sc-146203

BACKGROUND

Cytokines are small, soluble proteins with pleiotropic effects on a variety of cell types. Cytokines have a regulatory function over the immune system and mediate aspects of inflammatory response. They exert their biological effects through the binding of membrane-bound receptors which, in turn, initiate signal transduction cascades and elicit physiological changes in their target cell. The proinflammatory cytokine Interleukin 17D (IL-17D), also known as IL-27, is the largest member of the IL-17 family of cytokines. It is produced by CD4⁺ T cells and is predominantly expressed in brain, lung, heart, adipose tissue, pancreas and skeletal muscle. IL-17D regulates the production of other cytokines in endothelial cells, including IL-6, IL-8 and GM-CSF. It may play a role in the activation of the endothelium, which is the site of attachment for migrating immune cells. In addition, IL-17D may play a role in the amplification of a local immune response.

REFERENCES

1. Starnes, T., Broxmeyer, H.E., Robertson, M.J. and Hromas, R. 2002. Cutting edge: IL-17D, a novel member of the IL-17 family, stimulates cytokine production and inhibits hemopoiesis. *J. Immunol.* 169: 642-646.
2. Moseley, T.A., Haudenschild, D.R., Rose, L. and Reddi, A.H. 2003. Interleukin-17 family and IL-17 receptors. *Cytokine Growth Factor Rev.* 14: 155-174.
3. Oda, N., Canelos, P.B., Essayan, D.M., Plunkett, B.A., Myers, A.C. and Huang, S.K. 2004. Interleukin-17F induces pulmonary neutrophilia and amplifies antigen-induced allergic response. *Am. J. Respir. Crit. Care Med.* 171: 12-18.
4. You, Z., DuRaine, G., Tien, J.Y., Lee, C., Moseley, T.A. and Reddi, A.H. 2004. Expression of interleukin-17B in mouse embryonic limb buds and regulation by BMP-7 and bFGF. *Biochem. Biophys. Res. Commun.* 326: 624-631.
5. Kawaguchi, M., Adachi, M., Oda, N., Kokubu, F. and Huang, S.K. 2004. IL-17 cytokine family. *J. Allergy Clin. Immunol.* 114: 1265-1273.
6. Broxmeyer, H.E., Starnes, T., Ramsey, H., Cooper, S., Dahl, R., Williamson, E. and Hromas, R. 2006. The IL-17 cytokine family members are inhibitors of human hematopoietic progenitor proliferation. *Blood* 108: 770-770.
7. Tato, C.M., Laurence, A. and O'Shea, J.J. 2006. Helper T cell differentiation enters a new era: le roi est mort; vive le roi! *J. Exp. Med.* 203: 809-812.
8. Wittchen, F., Suckau, L., Witt, H., Skurk, C., Lassner, D., Fechner, H., Sipo, I., Ungethüm, U., Ruiz, P., Pauschinger, M., Tschöpe, C., Rauch, U., Kühl, U., Schultheiss, H.P. and Poller, W. 2007. Genomic expression profiling of human inflammatory cardiomyopathy (DCMi) suggests novel therapeutic targets. *J. Mol. Med.* 85: 253-267.
9. Bettelli, E., Oukka, M. and Kuchroo, V.K. 2007. T_H-17 cells in the circle of immunity and autoimmunity. *Nat. Immunol.* 8: 345-350.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.

CHROMOSOMAL LOCATION

Genetic locus: Il17d (mouse) mapping to 14 C3.

PRODUCT

IL-17D 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 μ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see IL-17D shRNA Plasmid (m): sc-146203-SH and IL-17D shRNA (m) Lentiviral Particles: sc-146203-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 μ l of the RNase-free water provided. Resuspension of the siRNA duplex in 330 μ l of RNase-free water makes a 10 μ M solution in a 10 μ M Tris-HCl, pH 8.0, 20 mM NaCl, 1 mM EDTA buffered solution.

APPLICATIONS

IL-17D siRNA (m) is recommended for the inhibition of IL-17D 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 μ M in 66 μ 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 IL-17D gene expression knockdown using RT-PCR Primer: IL-17D (m)-PR: sc-146203-PR (20 μ 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.