



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)



MAIR-II siRNA (m): sc-149232

BACKGROUND

MAIR-II (myeloid-associated immunoglobulin-like receptor 2), also known as CLM (CMRF35-like molecule), DlgR1 (dendritic cell-derived Ig-like receptor 1), IgSF7 (immunoglobulin superfamily member 7) or AF251705, is a 230 amino acid single-pass type I membrane protein. Belonging to the CD300 family, MAIR-II contains one Ig-like V-type (immunoglobulin-like) domain. MAIR-II is present on the surface of mast cells, dendritic cells, B cells and peritoneal macrophages, where it may act as an activating receptor. The gene encoding MAIR-II, which exists as two alternatively spliced isoforms, maps to mouse chromosome 11 E2.

REFERENCES

1. Luo, K., Zhang, W., Sui, L., Li, N., Zhang, M., Ma, X., Zhang, L. and Cao, X. 2001. DlgR1, a novel membrane receptor of the immunoglobulin gene superfamily, is preferentially expressed by antigen-presenting cells. *Biochem. Biophys. Res. Commun.* 287: 35-41.
2. Kumagai, H., Oki, T., Tamitsu, K., Feng, S.Z., Ono, M., Nakajima, H., Bao, Y.C., Kawakami, Y., Nagayoshi, K., Copeland, N.G., Gilbert, D.J., Jenkins, N.A., Kawakami, T. and Kitamura, T. 2003. Identification and characterization of a new pair of immunoglobulin-like receptors LMIR1 and 2 derived from murine bone marrow-derived mast cells. *Biochem. Biophys. Res. Commun.* 307: 719-729.
3. Yotsumoto, K., Okoshi, Y., Shibuya, K., Yamazaki, S., Tahara-Hanaoka, S., Honda, S., Osawa, M., Kuroiwa, A., Matsuda, Y., Tenen, D.G., Iwama, A., Nakauchi, H. and Shibuya, A. 2003. Paired activating and inhibitory immunoglobulin-like receptors, MAIR-I and MAIR-II, regulate mast cell and macrophage activation. *J. Exp. Med.* 198: 223-233.
4. Chung, D.H., Humphrey, M.B., Nakamura, M.C., Ginzinger, D.G., Seaman, W.E. and Daws, M.R. 2003. CMRF-35-like molecule-1, a novel mouse myeloid receptor, can inhibit osteoclast formation. *J. Immunol.* 171: 6541-6548.
5. Nakahashi, C., Tahara-Hanaoka, S., Totsuka, N., Okoshi, Y., Takai, T., Ohkohchi, N., Honda, S., Shibuya, K. and Shibuya, A. 2007. Dual assemblies of an activating immune receptor, MAIR-II, with ITAM-bearing adapters DAP12 and FcRγ chain on peritoneal macrophages. *J. Immunol.* 178: 765-770.
6. Nakano-Yokomizo, T., Tahara-Hanaoka, S., Nakahashi-Oda, C., Nabekura, T., Tchao, N.K., Kadosaki, M., Totsuka, N., Kurita, N., Nakamagoe, K., Tamaoka, A., Takai, T., Yasui, T., Kikutani, H., Honda, S., Shibuya, K., et al. 2011. The immunoreceptor adapter protein DAP12 suppresses B lymphocyte-driven adaptive immune responses. *J. Exp. Med.* 208: 1661-1671.

CHROMOSOMAL LOCATION

Genetic locus: AF251705 (mouse) mapping to 11 E2.

PROTOCOLS

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

PRODUCT

MAIR-II 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 MAIR-II shRNA Plasmid (m): sc-149232-SH and MAIR-II shRNA (m) Lentiviral Particles: sc-149232-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

MAIR-II siRNA (m) is recommended for the inhibition of MAIR-II 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 MAIR-II gene expression knockdown using RT-PCR Primer: MAIR-II (m)-PR: sc-149232-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.