

# Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



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# Lieferung & Zahlungsart

siehe unsere Liefer- und Versandbedingungen

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- Expressversand

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# DNAM-1 siRNA (m): sc-45776



The Power to Question

# **BACKGROUND**

The T cell antigen receptor (TCR) recognizes foreign antigens and translates such recognition events into intracellular signals that elicit a change in the cell from a dormant to an activated state. Additional proteins termed "accessory molecules" are also required for activation and for cytotoxic T lymphocyte (CTL)-mediated cytotoxicity. For instance, CD2, CD4, CD8, LFA-1, and CD28 are examples of well characterized accessory molecules. An accessory molecule designated DNAX accessory molecule-1 or DNAM-1 has been described. DNAM-1 is a transmembrane glycoprotein that is 318 amino acids in length and contains two immunoglobulin-like domains. DNAM-1 is expressed on both T cells and natural killer (NK) cells and participates in primary adhesion during CTL-mediated cytotoxicity.

# **REFERENCES**

- Arthos, J., et al. 1989. Identification of the residues in human CD4 critical for the binding of HIV. Cell 57: 469-481.
- Weiss, A., et al. 1991. Signal transduction by the T cell antigen receptor. Semin. Immunol. 3: 313-324.
- 3. Allison, J.P., et al. 1991. The immunobiology of T cells with invariant  $\gamma$   $\delta$  antigen receptors. Annu. Rev. Immunol. 9: 679-705.
- 4. Ehrich, E.W., et al. 1993. T cell receptor interaction with peptide/major histocompatibility complex (MHC) and superantigen/MHC ligands is dominated by antigen. J. Exp. Med. 178: 713-722.
- Julius, M., et al. 1993. Distinct roles for CD4 and CD8 as co-receptors in antigen receptor signalling. Immunol. Today 14: 177-183.
- 6. Vignali, D.A. 1994. The interaction between CD4 and MHC class II molecules and its effect on T cell function. Behring Inst. Mitt. 94: 133-147.
- 7. Shibuya, A., et al. 1996. DNAM-1, A novel adhesion molecule involved in the cytolytic function of T lymphocytes. Immunity 4: 573-581.

# **CHROMOSOMAL LOCATION**

Genetic locus: Cd226 (mouse) mapping to 18 E4.

#### **PRODUCT**

DNAM-1 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 DNAM-1 shRNA Plasmid (m): sc-45776-SH and DNAM-1 shRNA (m) Lentiviral Particles: sc-45776-V as alternate gene silencing products.

For independent verification of DNAM-1 (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-45776A, sc-45776B and sc-45776C.

# **PROTOCOLS**

See our web site at 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**

DNAM-1 shRNA Plasmid (m) is recommended for the inhibition of DNAM-1 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 µM in 66 µl. 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 DNAM-1 gene expression knockdown using RT-PCR Primer: DNAM-1 (m)-PR: sc-45776-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.

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