SANTA CRUZ BIOTECHNOLOGY, INC.

# MYADM siRNA (h): sc-97299

## BACKGROUND

Hematopoietic differentiation is an intricate process where multiple genes induce functional changes and various characteristics of different cell lineages. Identifying these genes is important in understanding lineage commitment and maturation of hematopoietic progenitor cells. MYADM (myeloid-associated differentiation marker), also known as SB135, is a novel hematopoietic-associated marker that is comprised of 322 amino acids and exists as a multi-pass membrane protein. Belonging to the MAL family of proteolipids, MYADM contains two highly conserved MARVEL domains and is widely expressed, except in thymus. Up-regulated during myeloid differentiation, MYADM is encoded by a gene located on human chromosome 19, which consists of over 63 million bases, houses approximately 1,400 genes and is recognized for having the greatest gene density of the human chromosomes.

## REFERENCES


1. Pettersson, M., et al. 2000. Isolation of MYADM, a novel hematopoietic-associated marker gene expressed in multipotent progenitor cells and upregulated during myeloid differentiation. J. Leukoc. Biol. 67: 423-431.
2. Cui, W., et al. 2001. Cloning of human myeloid-associated differentiation marker (MYADM) gene whose expression was up-regulated in NB4 cells induced by all-trans retinoic acid. Mol. Biol. Rep. 28: 123-138.
3. de Wit, N.J., et al. 2005. Analysis of differential gene expression in human melanocytic tumour lesions by custom made oligonucleotide arrays. Br. J. Cancer 92: 2249-2261.
4. Yagil, C., et al. 2005. Identification of hypertension-related genes through an integrated genomic-transcriptomic approach. Circ. Res. 96: 617-625.
5. Dannaeus, K., et al. 2005. Characterization of the mouse myeloid-associated differentiation marker (MYADM) gene: promoter analysis and protein localization. Mol. Biol. Rep. 32: 149-157.


## CHROMOSOMAL LOCATION

Genetic locus: MYADM (human) mapping to 19q13.42.

## PRODUCT

MYADM siRNA (h) 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 µM solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see MYADM shRNA Plasmid (h): sc-97299-SH and MYADM shRNA (h) Lentiviral Particles: sc-97299-V as alternate gene silencing products.

For independent verification of MYADM (h) gene silencing results, we also provide the individual siRNA duplex components. Each is available as 3.3 nmol of lyophilized siRNA. These include: sc-97299A, sc-97299B and sc-97299C.

## 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 µl of the RNAse-free water provided. Resuspension of the siRNA duplex in 330 µl of RNAse-free water makes a 10 µM solution in a 10 µM Tris-HCl, pH 8.0, 20 mM NaCl, 1 mM EDTA buffered solution.

## APPLICATIONS

MYADM siRNA (h) is recommended for the inhibition of MYADM expression in human 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 MYADM gene expression knockdown using RT-PCR Primer: MYADM (h)-PR: sc-97299-PR (20 µl). 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.