SANTA CRUZ BIOTECHNOLOGY, INC.

# CD39L2 siRNA (m): sc-142198

## BACKGROUND

CD39, also known as ectonucleoside triphosphate diphosphohydrolase 1 (ENP1), is an integral membrane glycoprotein that acts as an extracellular nucleotide-hydrolyzing enzyme. Characteristically, CD39 and other members of the ecto-ATPase family contain apyrase-conserved regions and function to mediate nucleotide catabolism. CD39L2, also known as ENTPD6 (ectonucleoside triphosphate diphosphohydrolase 6), IL6ST2 or IL-6SAG, is a 484 amino acid protein that is similar to CD39 and localizes to the membrane of the golgi apparatus. Expressed ubiquitously with highest expression in heart tissue, CD39L2 is thought to promote glycosylation reactions in the Golgi and may catalyze the hydrolysis of extracellular nucleotides. Like other members of the ecto-ATPase family, CD39L2 contains four apyrase-conserved regions and is catalytically activated by calcium and magnesium. Multiple isoforms of CD39L2 exist due to alternative splicing events.

## REFERENCES


1. Chadwick, B.P., et al. 1998. The CD39-like gene family: identification of three new human members (CD39L2, CD39L3, and CD39L4), their murine homologues, and a member of the gene family from *Drosophila melanogaster*. Genomics 50: 357-367.
2. Chadwick, B.P., et al. 1998. cDNA cloning and chromosomal mapping of a mouse gene with homology to NTPases. Mamm. Genome 9: 162-164.
3. Hicks-Berger, C.A., et al. 2000. Expression and characterization of soluble and membrane-bound human nucleoside triphosphate diphosphohydrolase 6 (CD39L2). J. Biol. Chem. 275: 34041-34045.
4. Yeung, G., et al. 2000. CD39L2, a gene encoding a human nucleoside diphosphatase, predominantly expressed in the heart. Biochemistry 39: 12916-12923.
5. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 603160. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/


## CHROMOSOMAL LOCATION

Genetic locus: Entpd6 (mouse) mapping to 2 G3.

## PRODUCT

CD39L2 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 µM solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see CD39L2 shRNA Plasmid (m): sc-142198-SH and CD39L2 shRNA (m) Lentiviral Particles: sc-142198-V as alternate gene silencing products.

For independent verification of CD39L2 (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-142198A, sc-142198B and sc-142198C.

## 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

CD39L2 siRNA (m) is recommended for the inhibition of CD39L2 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 CD39L2 gene expression knockdown using RT-PCR Primer: CD39L2 (m)-PR: sc-142198-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.