SANTA CRUZ BIOTECHNOLOGY, INC.

CD163L1 siRNA (h): sc-96130

BACKGROUND

CD163L1 (CD163 molecule-like 1), also known as scavenger receptor cysteine-rich type 1 protein M160 or CD163B, is a 1,453 amino acid protein that belongs to the scavenger receptor cysteine-rich (SRCR) superfamily. Members of the SRCR family contain SRCR domains which are used to influence ligand binding and protein-protein interaction, and are found in cells of the immune system where they exist as membrane-anchored or secreted proteins. Containing twelve SRCR domains, CD163L1 undergoes alternative splicing events to produce three isoforms. CD163L1 isoforms 1 and 2 are single-pass type I membrane proteins, unlike isoform 3, which is a secreted protein. CD163L1 isoform 1 is abundantly expressed in lymph node, spleen, thymus and fetal liver, and isoform 2 is found exclusively in spleen. The gene encoding CD163L1 maps to human chromosome 12p13.31.

REFERENCES

1. Stover, C.M., et al. 2000. Assignment of CD163B, the gene encoding M160, a novel scavenger receptor, to human chromosome 12p13.3 by *in situ* hybridization and somatic cell hybrid analysis. Cytogenet. Cell Genet. 90: 246-247.
2. Gronlund, J., et al. 2000. Cloning of a novel scavenger receptor cysteine-rich type I transmembrane molecule (M160) expressed by human macrophages. J. Immunol. 165: 6406-6415.
3. Zhang, Z., et al. 2004. Signal peptide prediction based on analysis of experimentally verified cleavage sites. Protein Sci. 13: 2819-2824.
4. Chen, R., J et al. 2009. Glycoproteomics analysis of human liver tissue by combination of multiple enzyme digestion and hydrazide chemistry. J. Proteome Res. 8: 651-661.
5. Online Mendelian Inheritance in Man, OMIM™. 2009. Johns Hopkins University, Baltimore, MD. MIM Number: 606079. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
6. Van Gorp, H., et al. 2010. Identification of the CD163 protein domains involved in infection of the porcine reproductive and respiratory syndrome virus. J. Virol. 84: 3101-3105.

CHROMOSOMAL LOCATION

Genetic locus: CD163L1 (human) mapping to 12p13.31.

PRODUCT

CD163L1 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 CD163L1 shRNA Plasmid (h): sc-96130-SH and CD163L1 shRNA (h) Lentiviral Particles: sc-96130-V as alternate gene silencing products.

For independent verification of CD163L1 (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-96130A, sc-96130B and sc-96130C.

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

CD163L1 siRNA (h) is recommended for the inhibition of CD163L1 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 CD163L1 gene expression knockdown using RT-PCR Primer: CD163L1 (h)-PR: sc-96130-PR (20 µl). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.

SELECT PRODUCT CITATIONS

1. Aviner, R., et al. 2017. Proteomic analysis of polyribosomes identifies splicing factors as potential regulators of translation during mitosis. Nucleic Acids Res. 45: 5945-5957.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

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