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IL-1F8 siRNA (m): sc-146211

BACKGROUND

IL-1 (Interleukin-1) is a cytokine responsible for initiating a variety of activities through the activation of transcription factors, NF κ B and AP-1, thereby promoting host response to injury or infection. The IL-1 superfamily is comprised of several ligands and receptors. IL-1F8, also known as IL-1h, or interleukin-1 homolog 2 (IL-1H2), is a secreted ligand belonging to this superfamily. IL-1F8 is highly expressed in epithelial cells but is also found in skeletal muscle and glial cells. IL-1F8 activates the IL-1Rrp2 and IL-1RAcP-dependent pathways leading to MAPKs, NF κ B activation and stimulation of IL-6 and IL-8 production. In addition, IL-1F8 may play a role in the pathogenesis of rheumatoid arthritis (RA). Two isoforms exist for this protein, isoform 1 and isoform 2. These isoforms differ from one another in their amino acid sequences between residues 88 and 164.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: IL1f8 (mouse) mapping to 2 A3.

PRODUCT

IL-1F8 siRNA (m) is a pool of 2 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 μ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see IL-1F8 shRNA Plasmid (m): sc-146211-SH and IL-1F8 shRNA (m) Lentiviral Particles: sc-146211-V as alternate gene silencing products.

For independent verification of IL-1F8 (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-146211A and sc-146211B.

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

IL-1F8 siRNA (m) is recommended for the inhibition of IL-1F8 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 IL-1F8 gene expression knockdown using RT-PCR Primer: IL-1F8 (m)-PR: sc-146211-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.

PROTOCOLS

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