SANTA CRUZ BIOTECHNOLOGY, INC.

IL-1F6 siRNA (m): sc-72169

BACKGROUND

IL-1 (interleukin-1) is a cytokine responsible for initiating a variety of activities through the activation of transcription factors, NFκB and AP-1, thereby promoting host response to injury or infection. The IL-1 superfamily is comprised of several ligands and receptors. IL-1F6, also known as interleukin-1 family member 6 (IL-1εF6) or interleukin-1 ε (IL-1ε), is a secreted ligand belonging to this superfamily. IL-1F6 is expressed in a variety of tissues, including lymph node, spleen, thymus, leukocytes, tonsil, fetal brain and bone marrow. It exists as a nitroprotein, post-translationally modified with a nitro group on tyrosine residue 96. IL-1F6 activates the IL-1Rrp2 and IL-1RAcP-dependent pathway leading to NFκB activation. Similar to other family members, IL-1F6 can be regulated by bacterial lipopolysaccharide (LPS).

REFERENCES

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PROTOCOLS

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

CHROMOSOMAL LOCATION

Genetic locus: Il1f6 (mouse) mapping to 2 A3.

PRODUCT

IL-1F6 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 IL-1F6 shRNA Plasmid (m): sc-72169-SH and IL-1F6 shRNA (m) Lentiviral Particles: sc-72169-V as alternate gene silencing products.

For independent verification of IL-1F6 (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-72169A, sc-72169B and sc-72169C.

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

IL-1F6 siRNA (m) is recommended for the inhibition of IL-1F6 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 IL-1F6 gene expression knockdown using RT-PCR Primer: IL-1F6 (m)-PR: sc-72169-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.