

PDC-TREM siRNA (m): sc-152122

BACKGROUND

Triggering receptor expressed on myeloid cells (TREM) family of proteins are cell surface receptors that may be involved in the innate and adaptive immune response. PDC-TREM (plasmacytoid dendritic cell-specific receptor), also known as Trem4 (triggering receptor expressed in myeloid cells 4) or A530064D06Rik, is a 229 amino acid protein that is encoded by a gene mapping to mouse chromosome 17 C. No human homolog to PDC-TREM currently exists. PDC-TREM is preferentially expressed following TLR (Toll-like receptor) stimulation, and associates with plexin-A1 on the PDC cell surface. Inhibition of PDC-TREM-plexin-A1 binding results in reduced PDC-TREM-dependent activation of IFN- α , as well as reduced activation of cell signaling molecules.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: A530064D06Rik (mouse) mapping to 17 C.

PRODUCT

PDC-TREM 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 PDC-TREM shRNA Plasmid (m): sc-152122-SH and PDC-TREM shRNA (m) Lentiviral Particles: sc-152122-V as alternate gene silencing products.

For independent verification of PDC-TREM (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-152122A and sc-152122B.

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

PDC-TREM siRNA (m) is recommended for the inhibition of PDC-TREM 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 PDC-TREM gene expression knockdown using RT-PCR Primer: PDC-TREM (m)-PR: sc-152122-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.