SANTA CRUZ BIOTECHNOLOGY, INC.

TNFα-IP 8L2 siRNA (h): sc-76702

BACKGROUND

TNFα-IP 8L2 (tumor necrosis factor, α-induced protein 8-like 2), also known as TIPE2, is a 184 amino acid protein that shares 94% identity with its mouse counterpart and belongs to the TNFAIP8 family. Expressed in spleen, thymus, small intestine and lymph node with lower levels present in colon, lung and skin, TNFα-IP 8L2 plays a role in maintaining immune homeostasis, specifically by acting as a negative regulator of both innate and adaptive immunity. In addition, TNFα-IP 8L2 functions as a negative regulator of T cell receptor function and is thought to promote FAS-induced apoptosis. The gene encoding TNFα-IP 8L2 maps to human chromosome 1, which spans 260 million base pairs, contains over 3,000 genes and comprises nearly 8% of the human genome.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: TNFAIP8L2 (human) mapping to 1q21.3.

PRODUCT

TNFα-IP 8L2 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 TNFα-IP 8L2 shRNA Plasmid (h): sc-76702-SH and TNFα-IP 8L2 shRNA (h) Lentiviral Particles: sc-76702-V as alternate gene silencing products.

For independent verification of TNFα-IP 8L2 (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-76702A, sc-76702B and sc-76702C.

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

TNFα-IP 8L2 siRNA (h) is recommended for the inhibition of TNFα-IP 8L2 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 TNFα-IP 8L2 gene expression knockdown using RT-PCR Primer: TNFα-IP 8L2 (h)-PR: sc-76702-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.