

T3JAM siRNA (h): sc-78894

BACKGROUND

T3JAM (TRAF3 interacting protein 3), also known as TRAF3-interacting JNK-activating modulator or TRAF3IP3, is a 551 amino acid single-pass type IV membrane protein that acts as an adaptor molecule and stimulates cell growth by modulating the c-Jun N-terminal kinase (JNK) pathway in conjunction with TRAF3. Expressed in thymus, bone marrow and spleen, T3JAM binds the isoleucine zipper of TRAF3 with its coiled-coil domain. T3JAM has been found to associate specifically with TRAF3 but not with other TRAF family members. As a result of alternative splicing events, three T3JAM isoforms exist. The gene encoding T3JAM maps to human chromosome 1, which spans about 260 million base pairs and comprises nearly 8% of the human genome. Aberrations in chromosome 1 are found in a variety of cancers including head and neck cancer, malignant melanoma and multiple myeloma.

REFERENCES

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2. Zhang, C., Xie, L., Cheng, H. and Wang, Y. 2007. TRAF3 interacts with Smac/DIABLO and enhances the proapoptotic effect of Smac/DIABLO in cytoplasm. *Acta Biochim. Biophys. Sin.* 39: 108-116.
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CHROMOSOMAL LOCATION

Genetic locus: TRAF3IP3 (human) mapping to 1q32.2.

PRODUCT

T3JAM 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 μ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see T3JAM shRNA Plasmid (h): sc-78894-SH and T3JAM shRNA (h) Lentiviral Particles: sc-78894-V as alternate gene silencing products.

For independent verification of T3JAM (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-78894A, sc-78894B and sc-78894C.

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 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

T3JAM siRNA (h) is recommended for the inhibition of T3JAM 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 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.

GENE EXPRESSION MONITORING

T3JAM (B-7): sc-398781 is recommended as a control antibody for monitoring of T3JAM gene expression knockdown by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) or immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

RT-PCR REAGENTS

Semi-quantitative RT-PCR may be performed to monitor T3JAM gene expression knockdown using RT-PCR Primer: T3JAM (h)-PR: sc-78894-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.