SANTA CRUZ BIOTECHNOLOGY, INC.

TBL2 siRNA (h): sc-89837

BACKGROUND

Transducin β-like protein 2 (TBL2), also known as WS β-transducin repeats protein, is a 447 amino acid protein belonging to the β transducin family. The mutations in the gene encoding TBL2 has been shown to cause certain cardiovascular and musculo-skeletal abnormalities observed in Williams-Beuren syndrome (WBS). WBS is an autosomal dominant developmental disorder that is characterized by supravalvular aortic stenosis (SVAS), multiple peripheral pulmonary arterial stenoses, elfin face, mental and statural deficiency, characteristic dental malformation and infantile hypercalcemia. It is a contiguous gene deletion syndrome caused by deletion of multiple genes at 7q11.23. Other genes involved in WBS include elastin, RFC2, LIMK-1 and FKBP6.

REFERENCES

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PROTOCOLS

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

CHROMOSOMAL LOCATION

Genetic locus: TBL2 (human) mapping to 7q11.23.

PRODUCT

TBL2 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 TBL2 shRNA Plasmid (h): sc-89837-SH and TBL2 shRNA (h) Lentiviral Particles: sc-89837-V as alternate gene silencing products.

For independent verification of TBL2 (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-89837A, sc-89837B and sc-89837C.

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

TBL2 siRNA (h) is recommended for the inhibition of TBL2 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 TBL2 gene expression knockdown using RT-PCR Primer: TBL2 (h)-PR: sc-89837-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.