

YMER siRNA (m): sc-76943

BACKGROUND

YMER, also known as CCDC50 (coiled-coil domain containing 50), C3orf6 or DFNA44, is a 306 amino acid cytoplasmic protein that exists as two alternatively spliced isoforms involved in EGFR signaling. YMER isoforms 1 and 2 (also designated isoforms short and long) are co-expressed in pancreas, placenta, liver, lung and kidney, but only isoform 1 is found at high levels in heart, brain and skeletal muscle. Containing multiple ubiquitin-interacting domains as well as tyrosine-phosphorylated residues, YMER negatively regulates NF κ B. The gene encoding YMER maps to human chromosome 3q28, and, when defective, is the cause of a form of hearing loss known as deafness autosomal dominant type 44 (DFNA44).

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Ccdc50 (mouse) mapping to 16 B2.

PRODUCT

YMER siRNA (m) is a target-specific 19-25 nt siRNA 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 YMER shRNA Plasmid (m): sc-76943-SH and YMER shRNA (m) Lentiviral Particles: sc-76943-V as alternate gene silencing products.

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

YMER siRNA (m) is recommended for the inhibition of YMER 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 YMER gene expression knockdown using RT-PCR Primer: YMER (m)-PR: sc-76943-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.