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Xlr4b siRNA (m): sc-155384

BACKGROUND

Xlr proteins are located in the cell nucleus and expression is highly correlated with characteristics of a mature phenotype in B lymphoid cells. Certain members of the Xlr gene family are closely linked to the murine X-linked immune deficiency (xid) mutation. The Xlr gene family encodes RNA transcripts specific to late-stage T and B cells. It is suggested that the Xlr family of proteins may provide a useful marker for studies on chromatin condensation or DNA recombination in oocytes. In addition, because of the localization of the Xlr gene family on the mouse X chromosome, the human equivalent of Xlr is a candidate gene for premature ovarian failure. Xlr4b (X-linked lymphocyte-regulated 4b), also known as Xlr4, is a 215 amino acid x-linked mouse protein that, like other x-linked proteins, plays a crucial role in mental development and proper mental functioning.

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CHROMOSOMAL LOCATION

Genetic locus: Xlr4b (mouse) mapping to X A7.3.

PRODUCT

Xlr4b 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 Xlr4b shRNA Plasmid (m): sc-155384-SH and Xlr4b shRNA (m) Lentiviral Particles: sc-155384-V as alternate gene silencing 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

Xlr4b siRNA (m) is recommended for the inhibition of Xlr4b 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 Xlr4b gene expression knockdown using RT-PCR Primer: Xlr4b (m)-PR: sc-155384-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.