SANTA CRUZ BIOTECHNOLOGY, INC.

Xlr3b shRNA (m) Lentiviral Particles: sc-155381-V

BACKGROUND

Xlr3b (X-linked lymphocyte-regulated 3b), also known as Xlr3, is a 226 amino acid X-linked mouse protein that, like other X-linked proteins, plays a crucial role in mental development and proper mental functioning. Upregulated during B cell terminal differentiation, Xlr3b regulates a variety of cognitive processes and behavioral events and, when inactivated, may be involved in the pathogenesis of Turner syndrome and Alzheimer's disease. Additionally, Xlr3b is highly expressed in B cell lymphoma tissue, suggesting a role for Xlr3b in tumorigenesis. The gene encoding Xlr3b maps to mouse chromosome X and belongs to a subfamily of Xlr genes.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Xlr3b (mouse) mapping to X A7.3.

PRODUCT

Xlr3b shRNA (m) Lentiviral Particles are concentrated, transduction-ready viral particles containing a target-specific construct that encodes a 19-25 nt (plus hairpin) shRNA designed to knock down gene expression. Each vial contains 200 µl frozen stock containing 1.0 x 10^6 infectious units of virus (IFU) in Dulbecco's Modified Eagle's Medium with 25 mM HEPES pH 7.3. Suitable for 10-20 transductions. Also see Xlr3b siRNA (m): sc-155381 and Xlr3b shRNA Plasmid (m): sc-155381-SH as alternate gene silencing products.

APPLICATIONS

Xlr3b shRNA (m) Lentiviral Particles is recommended for the inhibition of Xlr3b expression in mouse cells.

SUPPORT REAGENTS

Control shRNA Lentiviral Particles: sc-108080. Available as 200 µl frozen viral stock containing 1.0 x 10^6 infectious units of virus (IFU); contains an shRNA construct encoding a scrambled sequence that will not lead to the specific degradation of any known cellular mRNA.

RT-PCR REAGENTS

Semi-quantitative RT-PCR may be performed to monitor Xlr3b gene expression knockdown using RT-PCR Primer: Xlr3b (m)-PR: sc-155381-PR (20 µl). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.

BIOSAFETY

Lentiviral particles can be employed in standard Biosafety Level 2 tissue culture facilities (and should be treated with the same level of caution as with any other potentially infectious reagent). Lentiviral particles are replication-incompetent and are designed to self-inactivate after transduction and integration of shRNA constructs into genomic DNA of target cells.

STORAGE

Store lentiviral particles at -80° C. Stable for at least one year from the date of shipment. Once thawed, particles can be stored at 4° C for up to one week. Avoid repeated freeze thaw cycles.

RESEARCH USE

The purchase of this product conveys to the buyer the nontransferable right to use the purchased amount of the product and all replicates and derivatives for research purposes conducted by the buyer in his laboratory only (whether the buyer is an academic or for-profit entity). The buyer cannot sell or otherwise transfer (a) this product (b) its components or (c) materials made using this product or its components to a third party, or otherwise use this product or its components or materials made using this product or its components for Commercial Purposes.

PROTOCOLS

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