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MLN64 shRNA (h) Lentiviral Particles: sc-44439-V

BACKGROUND

Sterol transport is mediated by vesicles or by soluble protein carriers, such as steroidogenic acute regulatory protein (StAR). StAR is homologous to a family of proteins containing a 200-210 amino acid StAR-related lipid transfer (StART) domain, including StARD3 (also known as MLN64). Amplification of the gene which encodes MLN64 results in overexpression and coamplification with ErbB-2 in breast cancer cell lines. Immunoblot analysis shows expression in most breast cancer cell lines and tissues, as well as in an ovary carcinoma cell line. Immunofluorescence microscopy and mutation analysis shows cytoplasmic expression in condensation sites and perinuclear condensation in breast cancer biopsies. It is suggested that MLN64 acts on late endosome cholesterol traffic, possibly lowering cholesterol by shuttling it to a cytoplasmic receptor site.

REFERENCES

1. Tomasetto, C., et al. 1995. Identification of four novel human genes amplified and overexpressed in breast carcinoma and localized to the q11-q21.3 region of chromosome 17. *Genomics* 28: 367-376.
2. Moog-Lutz, C., et al. 1997. MLN64 exhibits homology with the steroidogenic acute regulatory protein (StAR) and is over-expressed in human breast carcinomas. *Int. J. Cancer* 71: 183-191.
3. Watari, H., et al. 1997. MLN64 contains a domain with homology to the steroidogenic acute regulatory protein (StAR) that stimulates steroidogenesis. *Proc. Natl. Acad. Sci. USA* 94: 8462-8467.
4. Alpy, F., et al. 2001. The steroidogenic acute regulatory protein homolog MLN64, a late endosomal cholesterol-binding protein. *J. Biol. Chem.* 276: 4261-4269.
5. Soccio, R.E., et al. 2002. The cholesterol-regulated StARD4 gene encodes a StAR-related lipid transfer protein with two closely related homologues, StARD5 and StARD6. *Proc. Natl. Acad. Sci. USA* 99: 6943-6948.
6. Alpy, F., et al. 2003. Metastatic lymph node 64 (MLN64), a gene overexpressed in breast cancers, is regulated by Sp/KLF transcription factors. *Oncogene* 22: 3770-3780.

CHROMOSOMAL LOCATION

Genetic locus: STARD3 (human) mapping to 17q12.

PRODUCT

MLN64 shRNA (h) Lentiviral Particles is a pool of concentrated, transduction-ready viral particles containing 3 target-specific constructs that encode 19-25 nt (plus hairpin) shRNA designed to knock down gene expression. Each vial contains 200 μ l frozen stock containing 1.0×10^6 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 MLN64 siRNA (h): sc-44439 and MLN64 shRNA Plasmid (h): sc-44439-SH as alternate gene silencing products.

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.

APPLICATIONS

MLN64 shRNA (h) Lentiviral Particles is recommended for the inhibition of MLN64 expression in human cells.

SUPPORT REAGENTS

Control shRNA Lentiviral Particles: sc-108080. Available as 200 μ l frozen viral stock containing 1.0×10^6 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.

GENE EXPRESSION MONITORING

MLN64 (H-237): sc-292868 is recommended as a control antibody for monitoring of MLN64 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 (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

RT-PCR REAGENTS

Semi-quantitative RT-PCR may be performed to monitor MLN64 gene expression knockdown using RT-PCR Primer: MLN64 (h)-PR: sc-44439-PR (20 μ l). Annealing temperature for the primers should be $55-60^\circ$ C and the extension temperature should be $68-72^\circ$ 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.

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

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