SANTA CRUZ BIOTECHNOLOGY, INC.

LRP16 siRNA (h): sc-96535

BACKGROUND

LRP16, also known as MACROD1 (MACRO domain-containing protein 1), is a 325 amino acid protein that contains one MACRO domain and acts as an essential cofactor of androgen receptor. By binding to androgen receptor (AR), LRP16 amplifies the transactivation function of AR in response to androgen. LRP16 may play an important role in carcinogenesis and/or progression of hormone-dependent cancers by a feed-forward mechanism that activates ERα (estrogen receptor alpha) transactivation. LRP16 could also be involved in invasive growth by down-regulating E-cadherin in endometrial cancer cells. The gene that encodes LRP16 consists of approximately 167,556 bases and maps to human chromosome 11q13.1.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: MACROD1 (human) mapping to 11q13.1.

PRODUCT

LRP16 siRNA (h) is a pool of 2 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 LRP16 shRNA Plasmid (h): sc-96535-SH and LRP16 shRNA (h) Lentiviral Particles: sc-96535-V as alternate gene silencing products.

For independent verification of LRP16 (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-96535A and sc-96535B.

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

LRP16 siRNA (h) is recommended for the inhibition of LRP16 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 LRP16 gene expression knockdown using RT-PCR Primer: LRP16 (h)-PR: sc-96535-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.

PROTOCOLS

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