SANTA CRUZ BIOTECHNOLOGY, INC.

ERV3 siRNA (h): sc-89473



BACKGROUND

ERV3 (endogenous retrovirus group 3, member 1), also known as HERV-R_7q21.2 provirus ancestral env polyprotein, envelope polyprotein or ERV-R envelope protein, is a 604 amino acid retroviral envelope protein that belongs to the gamma type-C retroviral envelope protein family and HERV class-I R env subfamily. Localizing to virion, high levels of ERV3 expression can be found in adrenal glands, sebaceous glands and placenta. ERV3 contains one CKS-17 immunosuppressive domain, which is common to many retroviral envelope proteins, and may mediate receptor recognition and membrane fusion during early infection. ERV3 is cleaved into two heterodimeric products: a surface protein, which mediates receptor recognition, and a transmembrane protein, which may anchor the envelope heterodimer to the viral membrane.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: ERV3-1 (human) mapping to 7q32.1.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PRODUCT

ERV3 siRNA (h) is a pool of 3 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 ERV3 shRNA Plasmid (h): sc-89473-SH and ERV3 shRNA (h) Lentiviral Particles: sc-89473-V as alternate gene silencing products.

For independent verification of ERV3 (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-89473A, sc-89473B and sc-89473C.

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

ERV3 siRNA (h) is recommended for the inhibition of ERV3 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 ERV3 gene expression knockdown using RT-PCR Primer: ERV3 (h)-PR: sc-89473-PR (20 µl). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.

PROTOCOLS

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