SANTA CRUZ BIOTECHNOLOGY, INC.

IGF2AS siRNA (h): sc-96884

BACKGROUND

The Insulin gene family, comprised of Insulin, Relaxin and Insulin-like growth factors I and II (IGF-I and IGF-II), encodes a group of structurally related polypeptides whose biological functions have diverged. The IGFs, including IGF-I and IGF-II, are critical regulators of cell proliferation and most of the growth promoting properties of both ligands are mediated by the IGF-I receptor, designated IGF-IR. IGF-I expression is regulated by growth hormone and mediates postnatal growth, while IGF-II is induced by placental lactogen during prenatal development. IGF2AS (insulin-like growth factor 2 antisense), also known as PEG8, is a 168 amino acid protein that is expressed at high levels in fetal kidney and is encoded by a gene which is anti-sense to the gene encoding human IGF-II. Defects in the gene encoding IGF2AS are associated with ovarian, breast and Wilms tumor tissues, suggesting a possible role for IGF2AS in carcinogenesis.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: IGF2-AS (human) mapping to 11p15.5.

PRODUCT

IGF2AS 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 IGF2AS shRNA Plasmid (h): sc-96884-SH and IGF2AS shRNA (h) Lentiviral Particles: sc-96884-V as alternate gene silencing products.

For independent verification of IGF2AS (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-96884A and sc-96884B.

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

IGF2AS siRNA (h) is recommended for the inhibition of IGF2AS 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 IGF2AS gene expression knockdown using RT-PCR Primer: IGF2AS (h)-PR: sc-96884-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.