SANTA CRUZ BIOTECHNOLOGY, INC.

CCDC62 siRNA (m): sc-142128

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

CCDC62 (coiled-coil domain containing 62), also known as aaa, CT109, ERAP75 or TSP-NY, is a 684 amino acid protein that is highly expressed in adult testis. Existing as three alternatively spliced isoforms, CCDC62 consists of two N-terminal coiled-coil motifs and two C-terminal LxxLL motifs. It is suggested that CCDC62 acts as a novel coactivator of ERα in prostate stromal cells. CCDC62 is encoded by a gene located on human chromosome 12, which encodes over 1,100 genes and comprises approximately 4.5% of the human genome. Chromosome 12 is associated with a variety of diseases and afflictions, including hypochondrogenesis, achondrogenesis, Kniest dysplasia, Noonan syndrome and trisomy 12p, which causes facial developmental defects and seizure disorders.

REFERENCES

1. Allen, T.L., et al. 1996. Cytogenetic and molecular analysis in trisomy 12p. Am. J. Med. Genet. 63: 250-256.
2. Zumkeller, W., et al. 2004. Genotype/phenotype analysis in a patient with pure and complete trisomy 12p. Am. J. Med. Genet. A 129A: 261-264.
3. Segel, R., et al. 2006. The natural history of trisomy 12p. Am. J. Med. Genet. A 140: 695-703.
4. Chen, M., et al. 2008. ERAP75 functions as a coactivator to enhance estrogen receptor α transactivation in prostate stromal cells. Prostate 68: 1273-1282.
5. Chen, M., et al. 2009. CCDC62/ERAP75 functions as a coactivator to enhance estrogen receptor β-mediated transactivation and target gene expression in prostate cancer cells. Carcinogenesis 30: 841-850.
6. Domae, S., et al. 2009. Identification of CCDC62-2 as a novel cancer/testis antigen and its immunogenicity. Int. J. Cancer 124: 2347-2352.

CHROMOSOMAL LOCATION

Genetic locus: Ccdc62 (mouse) mapping to 5 F.

PRODUCT

CCDC62 siRNA (m) is a target-specific 19-25 nt siRNA 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 CCDC62 shRNA Plasmid (m): sc-142128-SH and CCDC62 shRNA (m) Lentiviral Particles: sc-142128-V as alternate gene silencing products.

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

CCDC62 siRNA (m) is recommended for the inhibition of CCDC62 expression in mouse 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 CCDC62 gene expression knockdown using RT-PCR Primer: CCDC62 (m)-PR: sc-142128-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.