SANTA CRUZ BIOTECHNOLOGY, INC.

TAP26 siRNA (h): sc-96205

BACKGROUND

TAP26, also known as TTF-1-associated protein 26 (thyroid transcription factor 1-associated protein 26), CCDC59 (coiled-coil domain-containing protein 59) or BR22, is a 241 amino acid nuclear protein that belongs to the TAP26 family. As a component of the transcription complexes of the pulmonary surfactant-associated protein-B (SP-B) and pulmonary surfactant-associated protein-C (SP-C), TAP26 interacts with homeobox protein TTF-1 to enhance SP-B and SP-C promoter activity. Although otherwise ubiquitously expressed, in lung TAP26 is restricted to the alveolar epithelial cells. The gene that encodes TAP26 contains 6,502 bases and maps to human chromosome 12q21.31. Encoding over 1,100 genes, chromosome 12 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

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CHROMOSOMAL LOCATION

Genetic locus: CCDC59 (human) mapping to 12q21.31.

PRODUCT

TAP26 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 TAP26 shRNA Plasmid (h): sc-96205-SH and TAP26 shRNA (h) Lentiviral Particles: sc-96205-V as alternate gene silencing products.

For independent verification of TAP26 (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-96205A, sc-96205B and sc-96205C.

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

TAP26 siRNA (h) is recommended for the inhibition of TAP26 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 TAP26 gene expression knockdown using RT-PCR Primer: TAP26 (h)-PR: sc-96205-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.