SANTA CRUZ BIOTECHNOLOGY, INC.

# ANKRD12 siRNA (h): sc-72497

SANTA CRUZ BIOTECHNOLOGY

*The Power to Question*

## BACKGROUND

ANKRD12 (ankyrin repeat domain 12), also known as ANCO2 (ankyrin repeat-containing cofactor 2), is a 2,062 amino acid protein that localizes to the nucleus and contains three ANK repeats. Expressed as two alternatively spliced isoforms that are present at moderate levels in lung, brain, heart, kidney, liver and testis, ANKRD12 interacts with p160 coactivators and is thought to recruit HDACs (histone deacetylases) to p160 complexes, thereby inhibiting ligand-dependent transactivation. The gene encoding ANKRD12 localizes to human chromosome 18p11.22, which houses over 300 protein-coding genes and contains nearly 76 million bases. There are a variety of diseases associated with defects in chromosome 18-localized genes, some of which include trisomy 18 (also known as Edwards syndrome), Niemann-Pick disease, hereditary hemorrhagic telangiectasia, erythropoietic protoporphyria and follicular lymphomas.

## REFERENCES


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2. Nagase, T., Ishikawa, K., Suyama, M., Kikuno, R., Hirosawa, M., Miyajima, N., Tanaka, A., Kotani, H., Nomura, N. and Ohara, O. 1998. Prediction of the coding sequences of unidentified human genes. XII. The complete sequences of 100 new cDNA clones from brain which code for large proteins *in vitro*. DNA Res. 5: 355-364.
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## CHROMOSOMAL LOCATION

Genetic locus: ANKRD12 (human) mapping to 18p11.22.

## PRODUCT

ANKRD12 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 ANKRD12 shRNA Plasmid (h): sc-72497-SH and ANKRD12 shRNA (h) Lentiviral Particles: sc-72497-V as alternate gene silencing products.

For independent verification of ANKRD12 (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-72497A, sc-72497B and sc-72497C.

## PROTOCOLS

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

ANKRD12 siRNA (h) is recommended for the inhibition of ANKRD12 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 ANKRD12 gene expression knockdown using RT-PCR Primer: ANKRD12 (h)-PR: sc-72497-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.