SANTA CRUZ BIOTECHNOLOGY, INC.

CALCOCO1 siRNA (h): sc-95656

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

CCALCOCO1 (calcium-binding and coiled-coil domain-containing protein 1), also known as cocoa, calphoglin, sarcoma antigen NY-SAR-3 or coiled-coil co-activator protein, is a 691 amino acid protein that shuttles between the cytoplasm and nucleus and functions as co-activator for aryl hydrocarbon and nuclear receptors. A member of the CALCOCO family, CALCOCO1 forms a calphoglin complex with PPA1 and PGM 1 and contains multiple functional domains through which it acts as a component of both the androgen signaling pathway and the Wnt/β-catenin signaling pathway. CALCOCO1 exists as three alternatively spliced isoforms (termed Q9P1Z2-1, 2 and 3), which are encoded by genes mapping to human chromosome 12q13.13 and mouse chromosome 15 F3.

REFERENCES

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2. Yang, C.K., Kim, J.H., Li, H. and Stallcup, M.R. 2006. Differential use of functional domains by coiled-coil co-activator in its synergistic co-activator function with β-catenin or GRIP1. J. Biol. Chem. 281: 3389-3397.
3. Yang, C.K., Kim, J.H. and Stallcup, M.R. 2006. Role of the N-terminal activation domain of the coiled-coil co-activator in mediating transcriptional activation by β-catenin. Mol. Endocrinol. 20: 3251-3262.
4. Kim, J.H., Yang, C.K. and Stallcup, M.R. 2006. Downstream signaling mechanism of the C-terminal activation domain of transcriptional co-activator CoCoA. Nucleic Acids Res. 34: 2736-2750.
5. Yang, C.K., Kim, J.H., Ann, D.K. and Stallcup, M.R. 2008. Differential regulation of the two transcriptional activation domains of the coiled-coil co-activator CoCoA by sumoylation. BMC Mol. Biol. 9: 12.

CHROMOSOMAL LOCATION

Genetic locus: CALCOCO1 (human) mapping to 12q13.13.

PRODUCT

CALCOCO1 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 CALCOCO1 shRNA Plasmid (h): sc-95656-SH and CALCOCO1 shRNA (h) Lentiviral Particles: sc-95656-V as alternate gene silencing products.

For independent verification of CALCOCO1 (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-95656A, sc-95656B and sc-95656C.

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

CALCOCO1 siRNA (h) is recommended for the inhibition of CALCOCO1 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.

GENE EXPRESSION MONITORING

CALCOCO1 (A-10): sc-515670 is recommended as a control antibody for monitoring of CALCOCO1 gene expression knockdown by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) or immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

RT-PCR REAGENTS

Semi-quantitative RT-PCR may be performed to monitor CALCOCO1 gene expression knockdown using RT-PCR Primer: CALCOCO1 (h)-PR: sc-95656-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.