SANTA CRUZ BIOTECHNOLOGY, INC.

# COMMD10 siRNA (m): sc-142483

## BACKGROUND

The COMMD family represents a group of evolutionary conserved proteins that share a common COMM domain at their extreme C-terminus, which provides an interface for protein-protein interactions. COMMD10 (COMM domain containing 10), also known as PTD002 or HSPC305, is a 202 amino acid protein that belongs to the COMMD family and contains one COMM domain. The gene encoding COMMD10 maps to human chromosome 5, which contains 181 million base pairs and comprises nearly 6% of the human genome. Deletion of the p arm of chromosome 5 leads to Cri du chat syndrome, while deletion of the q arm or of chromosome 5 altogether is common in therapy-related acute myelogenous leukemias and myelodysplastic syndrome.

## REFERENCES


1. Burstein, E., et al. 2005. COMMD proteins, a novel family of structural and functional homologs of MURR1. J. Biol. Chem. 280: 22222-22232.
2. Murru, D., et al. 2008. Cri du chat mosaicism: an unusual case of partial deletion and partial deletion/ duplication of the short arm of chromosome 5, leading to an unusual cri du chat phenotype. Genet. Couns. 19: 381-386.
3. Sazawal, S., et al. 2009. Haematological & molecular profile of acute myelogenous leukaemia in India. Indian J. Med. Res. 129: 256-261.
4. Eisenmann, K.M., et al. 2009. 5q myelodysplastic syndromes: chromosome 5q genes direct a tumor-suppression network sensing actin dynamics. Oncogene 28: 3429-3441.
5. Wang, J.C. and Khan, A. 2010. Large distal 5p deletion with hemifacial microsomia and absence of cri-du-chat syndrome. Clin. Dysmorphol. 19: 38-39.
6. Yamamoto, K., et al. 2010. Two further cases of myelodysplastic syndrome and acute myeloid leukemia with der(5;19)(p10;q10): association with abnormalities involving chromosomes 12 and 21. Leuk. Res. 34: e38-e41.


## CHROMOSOMAL LOCATION

Genetic locus: Commd10 (mouse) mapping to 18 C.

## PRODUCT

COMMD10 siRNA (m) 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 COMMD10 shRNA Plasmid (m): sc-142483-SH and COMMD10 shRNA (m) Lentiviral Particles: sc-142483-V as alternate gene silencing products.

For independent verification of COMMD10 (m) gene silencing results, we also provide the individual siRNA duplex components. Each is available as 3.3 nmol of lyophilized siRNA. These include: sc-142483A, sc-142483B and sc-142483C.

## 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

COMMD10 siRNA (m) is recommended for the inhibition of COMMD10 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 COMMD10 gene expression knockdown using RT-PCR Primer: COMMD10 (m)-PR: sc-142483-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.