

# C5orf48 siRNA (h): sc-91588

## BACKGROUND

C5orf48 (chromosome 5 open reading frame 48), also known as FLJ27505, MGC163367 or MGC163369, is a 134 amino acid protein. Encoded by a gene that maps to human chromosome 5q23.2, C5orf48 is linked to Autosomal dominant leukodystrophy (ADLD). Chromosome 5 makes up approximately 6% of the human genome and contains 181 million base pairs, which encode 1,000 genes. Chromosome 5 is associated with Cockayne syndrome through the ERCC8 gene and familial adenomatous polyposis through the adenomatous polyposis coli (APC) tumor suppressor gene. Treacher Collins syndrome is caused by insertions or deletions within the TCOF1 gene and is also associated with chromosome 5. Deletion of 5q or chromosome 5 altogether is common in therapy-related acute myelogenous leukemias and myelodysplastic syndrome.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: C5orf48 (human) mapping to 5q23.2.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## PRODUCT

C5orf48 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  $\mu$ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see C5orf48 shRNA Plasmid (h): sc-91588-SH and C5orf48 shRNA (h) Lentiviral Particles: sc-91588-V as alternate gene silencing products.

For independent verification of C5orf48 (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-91588A, sc-91588B and sc-91588C.

## 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  $\mu$ l of the RNase-free water provided. Resuspension of the siRNA duplex in 330  $\mu$ l of RNase-free water makes a 10  $\mu$ M solution in a 10  $\mu$ M Tris-HCl, pH 8.0, 20 mM NaCl, 1 mM EDTA buffered solution.

## APPLICATIONS

C5orf48 siRNA (h) is recommended for the inhibition of C5orf48 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  $\mu$ M in 66  $\mu$ l. 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.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.