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# OTUD7A siRNA (m): sc-151944

## BACKGROUND

OTUD7A (OTU domain-containing protein 7A), also known as CEZANNE2, is a 926 amino acid cytoplasmic and nuclear protein that belongs to the peptidase C64 family. OTUD7A contains one A20-type zinc finger, one OTU domain and exists as two alternatively spliced isoforms. Hydrolyzing both linear and branched forms of polyubiquitin, OTUD7A has deubiquitinating activity that is directed towards "Lys-48" or "Lys-63"-linked polyubiquitin chains. The gene that encodes OTUD7A consists of approximately 174,262 bases and maps to human chromosome 15q13.3. Chromosome 15 houses over 700 genes and comprises nearly 3% of the human genome. Angelman and Prader-Willi syndromes are associated with loss of function or deletion of genes in the 15q11-q13 region. Tay-Sachs disease is a lethal disorder associated with mutations of the HEXA gene, which is encoded by chromosome 15, while Marfan syndrome is associated with chromosome 15 through the FBN1 gene.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: *Otud7a* (mouse) mapping to 7 C.

## PRODUCT

OTUD7A siRNA (m) is a target-specific 19-25 nt siRNA 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 OTUD7A shRNA Plasmid (m): sc-151944-SH and OTUD7A shRNA (m) Lentiviral Particles: sc-151944-V as alternate gene silencing 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

OTUD7A siRNA (m) is recommended for the inhibition of OTUD7A 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 OTUD7A gene expression knockdown using RT-PCR Primer: OTUD7A (m)-PR: sc-151944-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](http://www.scbt.com) for detailed protocols and support products.