



BRD9 siRNA (m): sc-141743

BACKGROUND

The bromodomain is an approximately 70 amino acid region that is found in a variety of proteins and is thought to be involved in protein-protein interactions and transcriptional activation. BRD9 (bromodomain-containing protein 9), also known as PRO9856 or LAVS3040, is a 501 amino acid protein that contains one bromodomain and may be involved in various protein interactions throughout the cell. The gene encoding BRD9 maps to chromosome 5p15.33 and is expressed as four isoforms due to alternative splicing events. With 181 million base pairs encoding around 1,000 genes, chromosome 5 comprises about 6% of human genomic DNA. Deletion of the p arm of chromosome 5 leads to Cri du chat syndrome, while deletion of the q arm on chromosome 5 is common in therapy-related acute myelogenous leukemias and myelodysplastic syndrome.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Brd9 (mouse) mapping to 13 C1.

PRODUCT

BRD9 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 μ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see BRD9 shRNA Plasmid (m): sc-141743-SH and BRD9 shRNA (m) Lentiviral Particles: sc-141743-V as alternate gene silencing products.

For independent verification of BRD9 (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-141743A, sc-141743B and sc-141743C.

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

APPLICATIONS

BRD9 siRNA (m) is recommended for the inhibition of BRD9 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 μ M in 66 μ 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.

RT-PCR REAGENTS

Semi-quantitative RT-PCR may be performed to monitor BRD9 gene expression knockdown using RT-PCR Primer: BRD9 (m)-PR: sc-141743-PR (20 μ l). 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 for detailed protocols and support products.