



IRF-2BP2 siRNA (h): sc-88031

BACKGROUND

Interferon regulatory factors-1 and -2 (IRF-1 and IRF-2) are DNA-binding proteins that function as regulators of both type I interferons (IFN- α and - β) and interferon-inducible genes. IRF-2BP2 (interferon regulatory factor 2 binding protein 2) is a 587 amino acid nuclear protein that belongs to the IRF-2BP family and exists as part of a corepressor complex with IRF-1 and IRF-2BP1. Interacting with the C-terminal domain of IRF-2, IRF-2BP2 functions to repress transcription in an IRF-2-dependent manner. IRF-2BP2 is expressed as three alternatively spliced isoforms and is encoded by a gene that maps to human chromosome 1. Chromosome 1 is the largest human chromosome, spanning about 260 million base pairs and comprising 8% of the human genome. Several disorders, including Stickler syndrome, Parkinsons disease, Gaucher disease, malignant melanoma and Usher syndrome, are caused by defects chromosome 1-localized genes.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: IRF2BP2 (human) mapping to 1q42.3.

PRODUCT

IRF-2BP2 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 μ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see IRF-2BP2 shRNA Plasmid (h): sc-88031-SH and IRF-2BP2 shRNA (h) Lentiviral Particles: sc-88031-V as alternate gene silencing products.

For independent verification of IRF-2BP2 (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-88031A, sc-88031B and sc-88031C.

RESEARCH USE

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

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

IRF-2BP2 siRNA (h) is recommended for the inhibition of IRF-2BP2 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 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 IRF-2BP2 gene expression knockdown using RT-PCR Primer: IRF-2BP2 (h)-PR: sc-88031-PR (20 μ l). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.