SANTA CRUZ BIOTECHNOLOGY, INC.

IVNS1ABP siRNA (m): sc-75350

BACKGROUND

IVNS1ABP (influenza virus NS1A binding protein), also known as ARA3, FLARA3, KIAA0850, NS1 or NS1BP, is a 642 amino acid protein that localizes to both the nucleus and the cytoplasm and contains one BACK domain, one BTB (POZ) domain and six kelch repeats. Functioning as a homodimer that is connected via its BTB domain, IVNS1ABP associates with F-Actin and, via this association, plays an important role in the organization and stabilization of the Actin skeleton. Due to its role in cytoskeletal function, IVNS1ABP participates in a variety of events throughout the cell, including the regulation of cell division and pre-mRNA splicing, the activation of the ERK signaling pathway and the protection of neurons from dendritic spines.

REFERENCES

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4. Sasagawa, K., et al. 2002. Identification of Nd1, a novel murine kelch family protein, involved in stabilization of Actin filaments. J. Biol. Chem. 277: 44140-44146.
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7. Perconti, G., et al. 2007. The kelch protein NS1-BP interacts with α-enolase/MBP-1 and is involved in c-Myc gene transcriptional control. Biochim. Biophys. Acta 1773: 1774-1785.

CHROMOSOMAL LOCATION

Genetic locus: Ivns1abp (mouse) mapping to 1 G2.

PRODUCT

IVNS1ABP 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 IVNS1ABP shRNA Plasmid (m): sc-75350-SH and IVNS1ABP shRNA (m) Lentiviral Particles: sc-75350-V as alternate gene silencing products.

For independent verification of IVNS1ABP (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-75350A, sc-75350B and sc-75350C.

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

IVNS1ABP siRNA (m) is recommended for the inhibition of IVNS1ABP 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.

GENE EXPRESSION MONITORING

IVNS1ABP (G-9): sc-373909 is recommended as a control antibody for monitoring of IVNS1ABP gene expression knockdown by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) or immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

RT-PCR REAGENTS

Semi-quantitative RT-PCR may be performed to monitor IVNS1ABP gene expression knockdown using RT-PCR Primer: IVNS1ABP (m)-PR: sc-75350-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 for detailed protocols and support products.