

USHBP1 siRNA (m): sc-154940

BACKGROUND

USHBP1 (Usher syndrome 1C binding protein 1), also known as MCC2 or AIEBP (autoimmune enteropathy (AIE)-75 binding protein protein), is a 703 amino acid member of the MCC family. USHBP1 has highest expression in heart, and moderate to low expression in skeletal muscle, kidney, liver, small intestine, placenta and lung. USHBP1 is a novel homologue of MCC (mutated in colon cancer) tumor suppressor and its C-terminus interacts with the first PDZ domain of USH1C (Usher syndrome type 1C). MCC is a coiled-coil protein that negatively regulates cell cycle progression during the G₁ to S transition via NFκB signaling pathway. The gene encoding USHBP1 is located on human chromosome 19, which consists of over 63 million bases, houses approximately 1,400 genes and is recognized for having the greatest gene density of the human chromosomes.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Ushbp1 (mouse) mapping to 8 B3.3.

PROTOCOLS

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

PRODUCT

USHBP1 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 USHBP1 shRNA Plasmid (m): sc-154940-SH and USHBP1 shRNA (m) Lentiviral Particles: sc-154940-V as alternate gene silencing products.

For independent verification of USHBP1 (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-154940A, sc-154940B and sc-154940C.

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

USHBP1 siRNA (m) is recommended for the inhibition of USHBP1 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 USHBP1 gene expression knockdown using RT-PCR Primer: USHBP1 (m)-PR: sc-154940-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.