

TIP20 siRNA (m): sc-154279

BACKGROUND

TIP20 (TTF-I-interacting peptide 20), also known as ZNF787 (zinc finger protein 787), is a 382 amino acid nuclear protein that may be involved in transcriptional regulation. With seven C₂H₂-type zinc fingers, TIP20 belongs to the Krüppel C₂H₂-type zinc-finger protein family. Upon DNA damage, TIP20 becomes phosphorylated most likely by Atm or ATR. The gene that encodes TIP20 maps to human chromosome 19q13.43. Consisting of around 63 million bases with more than 1,400 genes, chromosome 19 makes up over 2% of the human genome. It is the genetic home for a number of immunoglobulin superfamily members including the killer cell and leukocyte Ig-like receptors, a number of ICAMs, the CEACAM and PSG families, and Fcα receptors. Key genes for eye color and hair color also map to chromosome 19. Peutz-Jeghers syndrome, spinocerebellar ataxia type 6, the stroke disorder CADASIL, hypercholesterolemia and Insulin-dependent diabetes have been linked to chromosome 19.

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CHROMOSOMAL LOCATION

Genetic locus: Zfp787 (mouse) mapping to 7 A1.

PRODUCT

TIP20 siRNA (m) is a pool of 2 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 TIP20 shRNA Plasmid (m): sc-154279-SH and TIP20 shRNA (m) Lentiviral Particles: sc-154279-V as alternate gene silencing products.

For independent verification of TIP20 (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-154279A and sc-154279B.

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

TIP20 siRNA (m) is recommended for the inhibition of TIP20 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 TIP20 gene expression knockdown using RT-PCR Primer: TIP20 (m)-PR: sc-154279-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.