SANTA CRUZ BIOTECHNOLOGY, INC.

SAP 30BP siRNA (m): sc-153217

BACKGROUND

SAP 30BP (SAP 30 binding protein), also known as HTRG, HTRP or HCNGP, is a 308 amino acid protein that belongs to the HCNGP family and is believed to function as a transcription regulator. Expressed in brain, liver, spleen, kidney, lung and heart, SAP 30BP localizes to the nucleus and is induced in fibroblasts by binding of HSV-1 (herpes simplex virus 1). In the nucleus, SAP 30BP interacts with SAP 30, a component of the histone deacetylase complex that also contains mSin3A, HDAC1, HDAC2, RbAp48, RbAp46 and SAP 18. Via this interaction, SAP 30BP is thought to play a role in the regulation of genes related to cell survival. In addition, SAP 30BP is capable of inducing cell death, suggesting that it functions in cellular corepression of transcription and inhibition of cell survival.

REFERENCES

1. Zhang, Y., et al. 1998. SAP 30, a novel protein conserved between human and yeast, is a component of a histone deacetylase complex. Mol. Cell 1: 1021-1031.
2. Hu, R.M., et al. 2000. Gene expression profiling in the human hypothalamus-pituitary-adrenal axis and full-length cDNA cloning. Proc. Natl. Acad. Sci. USA 97: 9543-9548.
3. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 610218. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
4. Li, J.F., et al. 2004. HTRP—an immediate-early gene product induced by HSV1 infection in human embryo fibroblasts, is involved in cellular co-repressors. J. Biochem. 136: 169-176.
5. Stelzl, U., et al. 2005. A human protein-protein interaction network: a resource for annotating the proteome. Cell 122: 957-968.
6. Rual, J.F., et al. 2005. Towards a proteome-scale map of the human protein-protein interaction network. Nature 437: 1173-1178.

CHROMOSOMAL LOCATION

Genetic locus: Sap30bp (mouse) mapping to 11 E2.

PRODUCT

SAP 30BP 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 SAP 30BP shRNA Plasmid (m): sc-153217-SH and SAP 30BP shRNA (m) Lentiviral Particles: sc-153217-V as alternate gene silencing products.

For independent verification of SAP 30BP (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-153217A, sc-153217B and sc-153217C.

PROTOCOLS

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

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

SAP 30BP siRNA (m) is recommended for the inhibition of SAP 30BP 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

SAP 30BP (G-8): sc-514278 is recommended as a control antibody for monitoring of SAP 30BP 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 SAP 30BP gene expression knockdown using RT-PCR Primer: SAP 30BP (m)-PR: sc-153217-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.