

# HIVEP1 siRNA (h): sc-95382

## BACKGROUND

HIVEP1 (human immunodeficiency virus type I enhancer binding protein 1), also known as CIRIP (cirhin interaction protein), MBP-1 (major histocompatibility complex binding protein 1), ZNF40, CRYBP1 ( $\alpha$ A-crystallin binding protein 1) or PRDII-BF1 (positive regulatory domain II binding factor 1), is a large DNA-binding protein that belongs to the ZAS family. HIVEP1 contains a pair of C<sub>2</sub>H<sub>2</sub> zinc fingers with a serine/threonine-rich sequence and an acidic-rich region, as well as a ZAS domain. It is ubiquitously expressed and is directly involved in the transcriptional regulation of a variety of genes. There are homologs of this gene in *D. melanogaster* and *C. elegans*. In humans, HIVEP1 interacts with the IFN- $\beta$  promoter and enhancer in the HIV-1 long terminal repeat. It specifically binds to the DNA sequence 5'-GGGACTTTCC-3'. Various isoforms of HIVEP1 exist due to alternative splicing events. HIVEP1 may also participate in T-cell activation.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: HIVEP1 (human) mapping to 6p24.1.

## PRODUCT

HIVEP1 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  $\mu$ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see HIVEP1 shRNA Plasmid (h): sc-95382-SH and HIVEP1 shRNA (h) Lentiviral Particles: sc-95382-V as alternate gene silencing products.

For independent verification of HIVEP1 (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-95382A, sc-95382B and sc-95382C.

## 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  $\mu$ l of the RNase-free water provided. Resuspension of the siRNA duplex in 330  $\mu$ l of RNase-free water makes a 10  $\mu$ M solution in a 10  $\mu$ M Tris-HCl, pH 8.0, 20 mM NaCl, 1 mM EDTA buffered solution.

## APPLICATIONS

HIVEP1 siRNA (h) is recommended for the inhibition of HIVEP1 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  $\mu$ M in 66  $\mu$ 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.

## GENE EXPRESSION MONITORING

HIVEP1 (2417C2 a): sc-81097 is recommended as a control antibody for monitoring of HIVEP1 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).

## RT-PCR REAGENTS

Semi-quantitative RT-PCR may be performed to monitor HIVEP1 gene expression knockdown using RT-PCR Primer: HIVEP1 (h)-PR: sc-95382-PR (20  $\mu$ l). 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.