

HIVEP1 (2417C2 a): sc-81097

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 (α 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_2H_2 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- β promoter and enhancer in the HIV-1 long terminal repeat. It specifically binds to the DNA sequence 5'-GGGACTTCC-3'. Various isoforms of HIVEP1 exist due to alternative splicing events. HIVEP1 may also participate in T cell activation.

REFERENCES

- Otsuka, M., Fujita, M., Aoki, T., Ishii, S., Sugiura, Y., Yamamoto, T. and Inoue, J. 1995. Novel zinc chelators with dual activity in the inhibition of the κ B site-binding proteins HIVEP1 and NF κ B. *J. Med. Chem.* 38: 3264-3270.
- Fujita, M., Otsuka, M. and Sugiura, Y. 1996. Metal-chelating inhibitors of a zinc finger protein HIVEP1. Remarkable potentiation of inhibitory activity by introduction of SH groups. *J. Med. Chem.* 39: 503-507.
- Xu, G., Sze, S.H., Liu, C.P., Pevzner, P.A. and Arnheim, N. 1998. Gene hunting without sequencing genomic clones: finding exon boundaries in cDNAs. *Genomics* 47: 171-179.
- Tanaka, K., Matsumoto, Y., Nakatani, F., Iwamoto, Y. and Yamada, Y. 2000. A zinc finger transcription factor, α A-crystallin binding protein 1, is a negative regulator of the chondrocyte-specific enhancer of the α 1(II) collagen gene. *Mol. Cell. Biol.* 20: 4428-4435.
- Hicar, M.D., Liu, Y., Allen, C.E. and Wu, L.C. 2001. Structure of the human zinc finger protein HIVEP3: molecular cloning, expression, exon-intron structure, and comparison with paralogous genes HIVEP1 and HIVEP2. *Genomics* 71: 89-100.
- Dürr, U., Henningfeld, K.A., Hollemann, T., Knöchel, W. and Pieler, T. 2004. Isolation and characterization of the *Xenopus* HIVEP gene family. *Eur. J. Biochem.* 271: 1135-1144.
- Yamagiwa, H., Yamada, Y., Bolander, M.E. and Sarkar, G. 2004. Oligonucleotide decoy mimicking α A-crystallin-binding protein 1 binding site on mouse Col2a1 enhancer stimulates transcription from the adjacent Col2a1 promoter in chondrogenic ATDC5 cell. *Mol. Biotechnol.* 28: 1-8.
- Yang, X., Li, J., Qin, H., Yang, H., Li, J., Zhou, P., Liang, Y. and Han, H. 2005. Mint represses transactivation of the type II collagen gene enhancer through interaction with α A-crystallin-binding protein 1. *J. Biol. Chem.* 280: 18710-18716.
- Richter, A., Mitchell, G.A. and Rasquin, A. 2007. North American Indian childhood cirrhosis (NAIC). *Med. Sci.* 23: 1002-1007.

CHROMOSOMAL LOCATION

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

SOURCE

HIVEP1 (2417C2 a) is a mouse monoclonal antibody raised against a recombinant protein corresponding to the C-terminal region of HIVEP1 of human origin.

PRODUCT

Each vial contains 100 μ g IgG₁ in 1.0 ml of PBS with < 0.1% sodium azide and 1.0% stabilizer protein.

APPLICATIONS

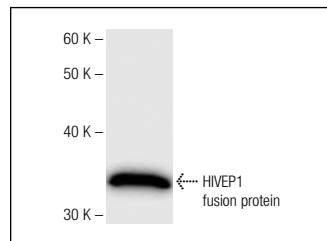
HIVEP1 (2417C2 a) is recommended for detection of HIVEP1 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)].

Suitable for use as control antibody for HIVEP1 siRNA (h): sc-95382, HIVEP1 shRNA Plasmid (h): sc-95382-SH and HIVEP1 shRNA (h) Lentiviral Particles: sc-95382-V.

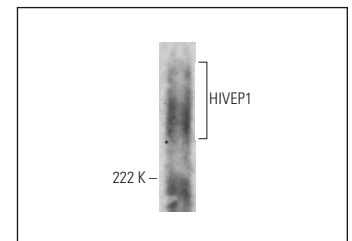
Molecular Weight of HIVEP1: 300 kDa.

Positive Controls: HeLa nuclear extract: sc-2120.

DATA



HIVEP1 (2417C2 a): sc-81097. Western blot analysis of human recombinant HIVEP1 fusion protein.



HIVEP1 (2417C2 a): sc-81097. Western blot analysis of HIVEP1 expression in HeLa nuclear extract.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

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.