

NREBP (L-20): sc-83734

BACKGROUND

NREBP (negative regulatory element-binding protein), also known as SON, SON3, BASS1 or DBP-5, is a 2,426 amino acid nuclear speckle protein that is widely expressed, with highest expression in leukocyte and heart. NREBP binds to a specific DNA sequence upstream of the regulatory sequence of the core promoter and second enhancer of human hepatitis B virus (HBV). Through this binding, NREBP represses HBV core promoter activity, transcription of HBV genes and production of HBV virions. NREBP has sequence similarities with other DNA-binding structural proteins such as gallin, Mos and oncoproteins of the Myc family. NREBP may be involved in protecting cells from apoptosis and in pre-mRNA splicing. Ten isoforms exist due to alternative splicing events.

REFERENCES

1. Berdichevski , F.B., Chumakov, I.M. and Kiselev, L.L. 1988. Decoding of the primary structure of the son3 region in human genome: identification of a new protein with unusual structure and homology with DNA-binding proteins. *Mol. Biol.* 22: 794-801.
2. Chumakov, I.M., Berdichevski , F.B., Sokolova, N.V., Reznikov, M.V. and Prasolov, V.S. 1991. Identification of a protein product of a novel human gene SON and the biological effect upon administering a changed form of this gene into mammalian cells. *Mol. Biol.* 25: 731-739.
3. Hu, K.Q. and Siddiqui, A. 1991. Regulation of the hepatitis B virus gene expression by the enhancer element I. *Virology* 181: 721-726.
4. Bliskovski , V.V., Berdichevski , F.B., Tkachenko, A.V., Belova, M.E. and Chumankov, I.M. 1992. Coding part of the son gene small transcript contains four areas of complete tandem repeats. *Mol. Biol.* 26: 793-806.
5. Bliskovski , V.V., Kirillov, A.V., Zakhar'ev, V.M. and Chumankov, I.M. 1992. The human son gene: the large and small transcripts contains various 5'-terminal sequences. *Mol. Biol.* 26: 807-812.
6. Huan, B. and Siddiqui, A. 1993. Regulation of hepatitis B virus gene expression. *J. Hepatol.* 17 Suppl. 3: S20-S23.
7. Sun, C.T., Lo, W.Y., Wang, I.H., Lo, Y.H., Shiou, S.R., Lai, C.K. and Ting, L.P. 2001. Transcription repression of human hepatitis B virus genes by negative regulatory element-binding protein/SON. *J. Biol. Chem.* 276: 24059-24067.
8. Moolla, N., Kew, M. and Arbuthnot, P. 2002. Regulatory elements of hepatitis B virus transcription. *J. Viral Hepat.* 9: 323-331.

CHROMOSOMAL LOCATION

Genetic locus: SON (human) mapping to 21q22.11.

SOURCE

NREBP (L-20) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of NREBP of human origin.

STORAGE

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

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-83734 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

NREBP (L-20) is recommended for detection of NREBP of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for NREBP siRNA (h): sc-91455, NREBP shRNA Plasmid (h): sc-91455-SH and NREBP shRNA (h) Lentiviral Particles: sc-91455-V.

Molecular Weight of NREBP: 264 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

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



Try **NREBP (C-10): sc-398508**, our highly recommended monoclonal alternative to NREBP (L-20).