
anti-Sp1

Cat #: HM1340
Rabbit polyclonal IgG
0.2 µg/µl, store at 4 °C

For research use only

BACKGROUND

The Sp zinc finger transcription factor family is composed of four members (Sp1, Sp2, Sp3 and Sp4) that share similar structures. All four proteins contain a highly conserved DNA-binding domain composed of three zinc fingers at the C-terminus. They bind the consensus sequence GGGGCGGGGC and other closely related sequences which are known as GC boxes. Sp1, Sp3 and Sp4 are more closely related to each other than to Sp2, which does not bind to a GC-box but to a GT-rich element. Sp1, Sp2 and Sp3 are ubiquitously expressed, while Sp4 is abundantly expressed in brain with limited expression in other tissues.

SPECIFICITY

This antibody specifically reacts with both p95 and p106 Sp1 proteins of human, mouse and rat origin; non cross-reactive with Sp2, Sp3 or Sp4.

The antibody can be used in Western blotting, immunoprecipitation and immunohistochemistry.

Molecular Weight of Sp1: 105 kDa.

IMMUNOGEN

A synthetic peptide derived from C-terminus of rat sp1 protein.

STORAGE

This antibody is stable for 12 months when stored at 2-8°C.

REFERENCES

1. Dynan, W.S. et al. 1983. Isolation of transcription factors that discriminate between different promoters recognized by RNA polymerase II. *Cell* 32: 669-680.
2. Dynan, W.S. et al. 1983. The promoter-specific transcription factor Sp1 binds to upstream sequences in the SV40 early promoter. *Cell* 35: 79-87.
3. Kadonaga, J.T., et al. 1987. Isolation of cDNA encoding transcription factor Sp1 and functional analysis of the DNA binding domain. *Cell* 51: 1079-1090.
4. Kadonaga, J.T., Courey, A.J., Ladika, J., and Tjian, R. 1988. Promoter-selective activation of transcription by Spl. in *The Control of Human Retrovirus Gene Expression*. Franza, B.R. Jr., Cullen, B.R., and Wong-Staal, F., eds. Cold Spring Harbor Laboratory, Cold Spring Harbor, NY: 239-250.
5. Kingsley, C. and Winoto, A. 1992. Cloning of GT box-binding proteins: a novel Sp1 multigene family regulating T-cell receptor gene expression. *Mol. Cell. Biol.* 12: 4251-4261.
6. Hagen, G., Müller, S., Beato, M., and Suske, G. 1992. Cloning by recognition site screening of two novel GT box

binding proteins: a family of Sp1 related genes. *Nucleic Acids Res.* 20: 5519-5525.

7. Hagen, G., Müller, S., Beato, M., and Suske, G. 1994. Sp1-mediated transcriptional activation is repressed by Sp3. *EMBO J.* 13: 3843-3851.
8. Hagen, G., Dennig, J., Preiss, A., Beato, M., and Suske, G. 1995. Functional analyses of the transcription factor Sp4 reveal properties distinct from Sp1 and Sp3. *J. Biol. Chem.* 270: 24989-24994.
9. Bigger, C.B., Melnikova, I.N., and Gardner, P.D. 1997. Sp1 and Sp3 regulate expression of the neuronal nicotinic acetylcholine receptor beta4 subunit gene. *J. Biol. Chem.* 272: 25976-25982.

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