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Sp2 (m): 293T Lysate: sc-126035

BACKGROUND

The Sp transcription factor family includes Sp1, Sp2, Sp3 (SPR-2) and Sp4 (SPR-1). Sp transcription factors share similar structures but do not share similar functions. All four proteins contain a highly conserved DNA-binding domain composed of three zinc fingers at the C-terminus. Sp family members bind the consensus sequence GGGCGGGGC and other closely related sequences which are known as GC boxes. Sp1, Sp3 and Sp4 share a high affinity for GC boxes while Sp2 does not. Sp2 only weakly binds to GT boxes. Sp1, Sp2 and Sp3 are ubiquitously expressed, while Sp4 is abundantly expressed in brain with limited expression in other tissues. Sp1 and Sp3, but not Sp2 or Sp4, interact with E2, a regulatory element for the β 4 subunit of neuronal nicotinic acetylcholine receptors. Sp3 is the only Sp member to inhibit Sp1 and Sp4 mediated transcription. The gene encoding human Sp2 maps to chromosome 17q21.32.

REFERENCES

- Kadonaga, J.T., Courey, A.J., Ladika, J. and Tjian, R. 1988. Promoter-selective activation of transcription by Sp1. In Cullen, B.R. and Wong-Staal, F., eds. *The Control of Human Retrovirus Gene Expression*. Cold Spring Harbor, NY: Cold Spring Harbor Laboratory Press, 239-250.
- 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.
- 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.
- Hagen, G., Müller, S., Beato, M. and Suske, G. 1994. Sp1-mediated transcriptional activation is repressed by Sp3. *EMBO J.* 13: 3843-3851.
- 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.
- Bigger, C.B., Melnikova, I.N. and Gardner, P.D. 1997. Sp1 and Sp3 regulate expression of the neuronal nicotinic acetylcholine receptor β 4 subunit gene. *J. Biol. Chem.* 272: 25976-25982.
- Phan, D., Cheng, C.J., Galfione, M., Vakar-Lopez, F., Tunstead, J., Thompson, N.E., Burgess, R.R., Najjar, S.M., Yu-Lee, L.Y. and Lin, S.H. 2004. Identification of Sp2 as a transcriptional repressor of carcinoembryonic antigen-related cell adhesion molecule 1 in tumorigenesis. *Cancer Res.* 64: 3072-3078.
- Moorefield, K.S., Yin, H., Nichols, T.D., Cathcart, C., Simmons, S.O. and Horowitz, J.M. 2006. Sp2 localizes to subnuclear foci associated with the nuclear matrix. *Mol. Biol. Cell* 17: 1711-1722.
- LocusLink Report (LocusID: 6668). <http://www.ncbi.nlm.nih.gov/LocusLink/>

CHROMOSOMAL LOCATION

Genetic locus: Sp2 (mouse) mapping to 11 D.

PRODUCT

Sp2 (m): 293T Lysate represents a lysate of mouse Sp2 transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

APPLICATIONS

Sp2 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive Sp2 antibodies. Recommended use: 10-20 μ l per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. 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.