

PRODUCT DATA SHEET

Bioworld Technology,Inc.

SP1 monoclonal antibody

Catalog: MB66833 Host: Mouse Reactivity: Human

BackGround:

Sp1 is a sequence-specific transcription factor that recognizes GGGGCGGGC and closely related sequences, which are often referred to as GC boxes. Sp1 was initially identified as a HeLa cell-derived factor that selectively activates in vitro transcription from the SV40 promoter and binds to the multiple GC boxes in the 21 bp repeated elements in SV40. The sequence specificity of DNA binding is conferred by Zn (II) fingers, whereas a different region of Sp1 appears to regulate the affinity of DNA binding. Sp1 belongs to a subgroup of transcription factors that are phosphorylated upon binding to promoter sequences. Evidence suggests that the early growth response gene, Erg-1 (also known as Zif268 or NGF1-A), may downregulate certain mammalian gene promoters by competing with Sp1 for binding to an overlapping binding motif. The gene encoding human Sp1 maps to chromosome 12q13.13.

Product:

Mouse IgG1 kappa. Liquid in PBS, pH 7.3, 30% glycerol, and 0.01% sodium azide.

Molecular Weight:

~ 105 kDa

Swiss-Prot:

P08047

Purification&Purity:

This antibody is purified through a protein G column.

Applications:

WB (1/500 - 1/1000), IF/ICC (1/10 - 1/50), FC (1/10 - 1/50)

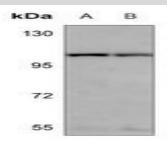
Storage&Stability:

Store at $4\,\mathrm{C}$ short term. Aliquot and store at $-20\,\mathrm{C}$ long term. Avoid freeze-thaw cycles.

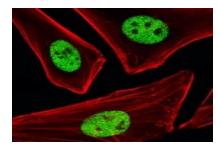
Specificity:

Recognizes endogenous levels of SP1 protein.

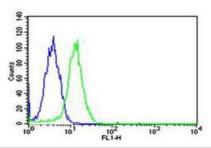
DATA:



Western blot analysis of SP1 expression in Hela (A), Ramos (B) whole cell lysates.



Immunofluorescent analysis of SP1 staining in Hela cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF555 was used to stain the cytoplasm (red). DAPI was used to stain the cell nuclei (blue).



Note:

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

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