

Sp1 antibody (pAb)

Catalog No: 39058

RRID: AB_2793151 **Isotype:** IgG

Application(s): ChIP, ChIP-Seq, IF, WB

Reactivity: Human, Mouse, Rat

Volume: 100 µl

Purification: Affinity Purified

Host: Rabbit

Concentration: 0.512 μg/μl **Molecular Weight:** 97 kDa

Background: Sp1 (specificity protein 1) is a human transcription factor involved in gene expression in the early development of an organism. The protein is 785 amino acids long, with a molecular weight of 81 kDa. The SP1 transcription factor contains a zinc finger protein motif, by which it binds directly to DNA and enhances gene transcription. Its zinc fingers are of the Cys2/His2 type and bind the consensus sequence 5′-(G/T)GGGCGG(G/A)(G/A)(C/T)-3′ (GC box element). It was discovered in 1983 and has since been modified to form Sp1C, which has a zinc finger protein DNA binding domain.

Immunogen: This Sp1 antibody was raised against a synthetic peptide corresponding to amino acid residues 520-534 of human Sp1.

Buffer: PBS containing 0.2% gelatin, 0.01% thimerosal and 0.1% sodium azide. Thimerosal and sodium azide are highly toxic.

Application Notes:

Applications Validated by Active Motif:

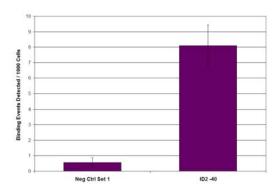
ChIP: 5 - 10 µl per ChIP WB: 1:500 - 1:1,000 dilution

For optimal results in Western blotting, primary antibody incubations should be performed at 37°C. Individual optimization may be required.

Storage and Guarantee: Some products may be shipped at room temperature. This will not affect their stability or performance. Avoid repeated freeze/thaw cycles by aliquoting items into single-use fractions for storage at -20°C for up to 2 years. Keep all reagents on ice when not in storage. This product is guaranteed for 12 months from date of receipt.

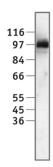
This product is for research use only and is not for use in diagnostic procedures.





Sp1 antibody tested by ChIP.

Chromatin immunoprecipitation (ChIP) was performed using the ChIP-IT $^{\circ}$ High Sensitivity Kit (Cat. No. 53040) with 20 μ g of chromatin from B cell lymphoma Namalwa cells and 6 μ l of Sp1 antibody. ChIP DNA was used in qPCR with the control primer pairs or gene-specific primer pairs as indicated. Data are presented as Binding Events Detected per 1000 Cells using Active Motif's Epigenetic Services normalization scheme which accounts for primer efficiency and the amount of chromatin used in the ChIP reaction.



Sp1 antibody tested by Western blot.

Detection of Sp1 by Western blot analysis. Sp1 was detected in nuclear extracts derived from K -562 cells using Sp1 rabbit polyclonal antibody at a 1:1,000 dilution.