

# SP1 Rabbit mAb

Catalog No.: A19649 **Recombinant** **4 Publications**

## Basic Information

### Observed MW

90kDa

### Calculated MW

81kDa

### Category

Primary antibody

### Applications

WB, IHC-P, IF/ICC, ELISA, CHIP, CHIP-seq, CUT&Tag

### Cross-Reactivity

Human, Mouse, Rat

### CloneNo number

ARC0128

## Background

The protein encoded by this gene is a zinc finger transcription factor that binds to GC-rich motifs of many promoters. The encoded protein is involved in many cellular processes, including cell differentiation, cell growth, apoptosis, immune responses, response to DNA damage, and chromatin remodeling. Post-translational modifications such as phosphorylation, acetylation, glycosylation, and proteolytic processing significantly affect the activity of this protein, which can be an activator or a repressor. Three transcript variants encoding different isoforms have been found for this gene.

## Recommended Dilutions

**WB** 1:500 - 1:2000

**IHC-P** 1:50 - 1:200

**IF/ICC** 1:50 - 1:200

**ELISA** Recommended starting concentration is 1 µg/mL. Please optimize the concentration based on your specific assay requirements.

**ChIP** 5µg antibody for 10µg-15µg of Chromatin

**ChIP-seq** 1:50 - 1:100

**CUT&Tag** 10<sup>5</sup> cells /1 µg

## Immunogen Information

### Gene ID

6667

### Swiss Prot

P08047

### Immunogen

A synthetic peptide corresponding to a sequence within amino acids 500-600 of human SP1 (P08047).

### Synonyms

SP1

## Product Information

### Source

Rabbit

### Isotype

IgG

### Purification

Affinity purification

### Storage

Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS with 0.02% sodium azide, 0.05% BSA, 50% glycerol, pH7.3.

## Contact

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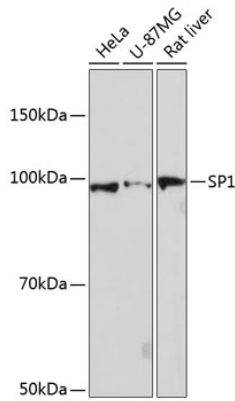
 | 400-999-6126

 | [cn.market@abclonal.com.cn](mailto:cn.market@abclonal.com.cn)

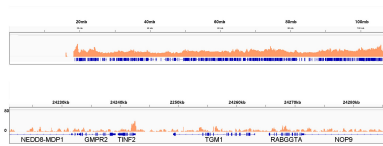
 | [www.abclonal.com.cn](http://www.abclonal.com.cn)

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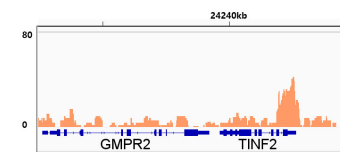
## Validation Data



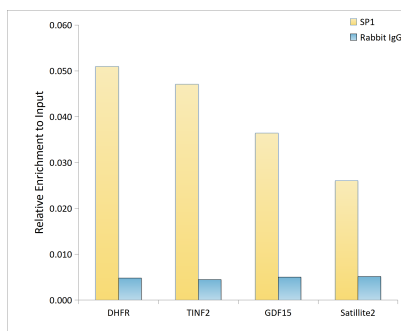
Western blot analysis of various lysates using SP1 Rabbit mAb (A19649) at 1:1000 dilution. Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution. Lysates/proteins: 25µg per lane. Blocking buffer: 3% nonfat dry milk in TBST. Detection: ECL Basic Kit (RM00020). Exposure time: 90s.



Chromatin immunoprecipitation was performed with 25 µg of cross-linked chromatin from 293T cells using 5 µg of SP1 Rabbit mAb (A19649). DNA libraries were prepared using Scale ssDNA-seq Lib Prep Kit for Illumina V2 (RK20228). The ChIP sequencing results indicate the enrichment pattern of SP1 across chromosome 14 (upper panel) and the genomic region encompassing TINF2, a representative gene enriched in SP1 (lower panel).

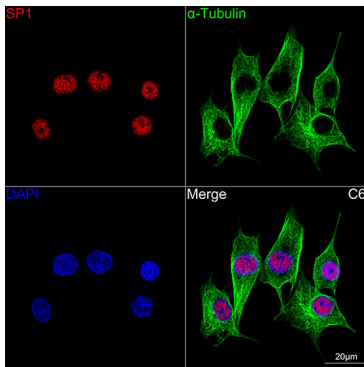


Chromatin immunoprecipitation was performed with 25 µg of cross-linked chromatin from 293T cells using 5 µg of SP1 Rabbit mAb (A19649). DNA libraries were prepared using Scale ssDNA-seq Lib Prep Kit for Illumina V2 (RK20228). The ChIP sequencing results indicate the enrichment pattern of SP1 in the representative genomic region surrounding the TINF2 gene.

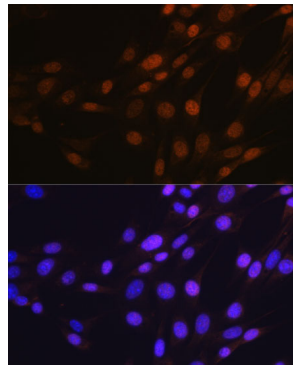


Chromatin immunoprecipitation analysis of extracts of 293T cells, using SP1 antibody (A19649) and rabbit IgG. The amount of immunoprecipitated DNA was checked by quantitative PCR. Histogram was constructed by the ratios of the immunoprecipitated DNA to the input.

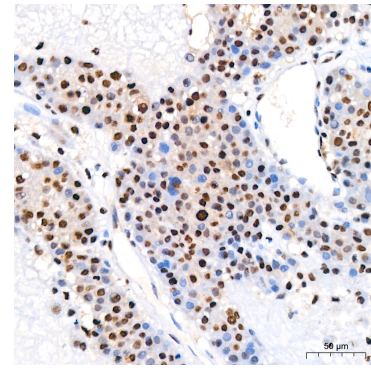
## Validation Data



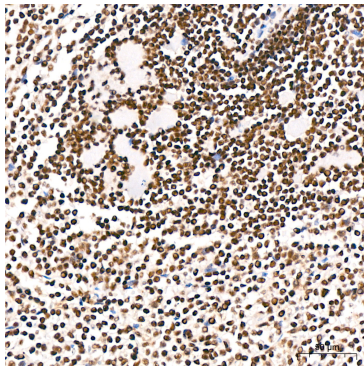
Confocal imaging of C6 cells using SP1 Rabbit mAb (A19649, at dilution of 1:100) (Red). The cells were counterstained with  $\alpha$ -Tubulin Mouse mAb (AC012, dilution 1:400) (Green). DAPI was used for nuclear staining (blue). Objective: 100x.



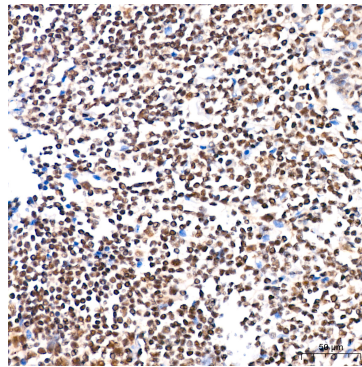
Immunofluorescence analysis of NIH-3T3 cells using SP1 Rabbit mAb (A19649) at dilution of 1:100 (40x lens). Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.



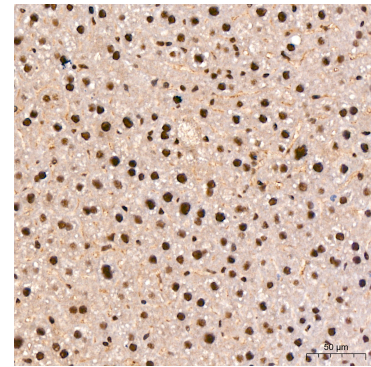
Immunohistochemistry analysis of paraffin-embedded Human liver cancer tissue using SP1 Rabbit mAb (A19649) at a dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate Buffer (pH 6.0) prior to IHC staining.



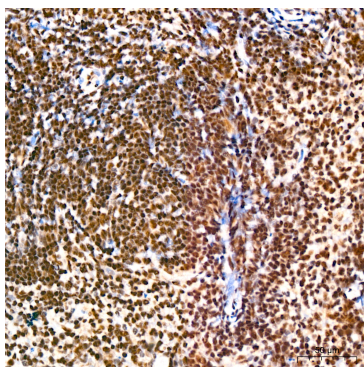
Immunohistochemistry analysis of paraffin-embedded Human spleen tissue using SP1 Rabbit mAb (A19649) at a dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate Buffer (pH 6.0) prior to IHC staining.



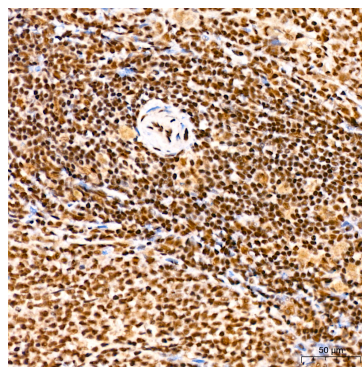
Immunohistochemistry analysis of paraffin-embedded Human tonsil tissue using SP1 Rabbit mAb (A19649) at a dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate Buffer (pH 6.0) prior to IHC staining.



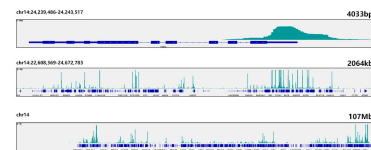
Immunohistochemistry analysis of paraffin-embedded Mouse liver tissue using SP1 Rabbit mAb (A19649) at a dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate Buffer (pH 6.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Mouse spleen tissue using SP1 Rabbit mAb (A19649) at a dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate Buffer (pH 6.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Rat spleen tissue using SP1 Rabbit mAb (A19649) at a dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate Buffer (pH 6.0) prior to IHC staining.



CUT&Tag was performed using the CUT&Tag Assay Kit (pAG-Tn5) for Illumina (RK20265) from  $10^5$  Hep G2 cells with 1  $\mu$ g SP1 Rabbit mAb (A19649), along with a Goat Anti-Rabbit IgG(H+L). The CUT&Tag results indicate the enrichment pattern of SP1 in representative gene loci (TIN2), as shown in figure.