

SP1 Rabbit mAb

Catalog No.: A19649

Recombinant

10 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 1:1000 - 1:2000

IHC-P 1:200 - 1:2000

IF/ICC 1:100 - 1:400

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 10⁵ cells /1 µg

Immunogen Information

Gene ID

6667

Swiss Prot

P08047

Immunogen

Synthetic peptide. This information is considered to be commercially sensitive.

Synonyms

SP1

Product Information

Source

Rabbit

Isotype

IgG

Purification

Affinity purification

Storage

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

Buffer: PBS containing 50% glycerol and 0.05% BSA, preserved with proclin300 or sodium azide (as specified on the Certificate of Analysis), pH 7.3.

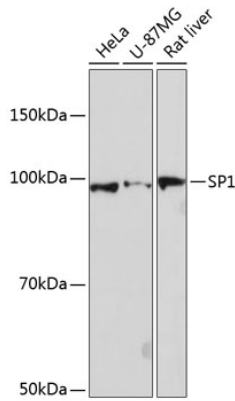
Contact

 | 400-999-6126

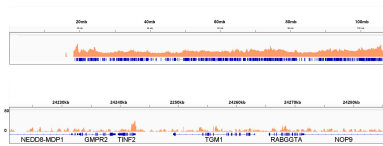
 | cn.market@abclonal.com.cn

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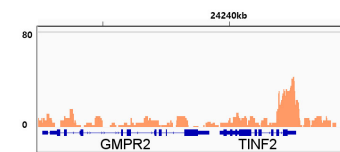
Validation Data



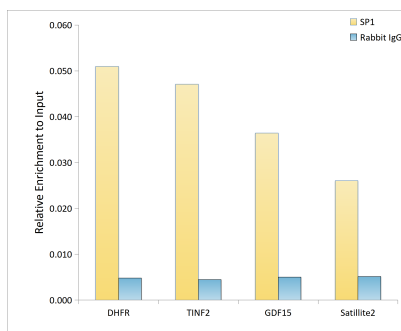
Western blot analysis of various lysates using SP1 Rabbit mAb (A19649) at 1:1000 dilution. Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution. Lysates/proteins: 25µg per lane. Blocking buffer: 3% nonfat dry milk in TBST. Detection: ECL Basic Kit (RM00020). Exposure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

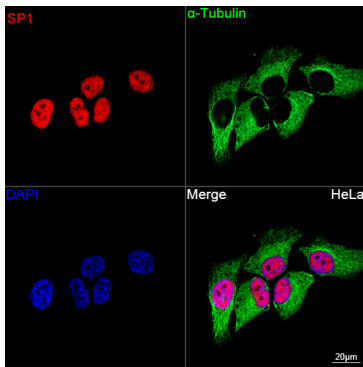


Chromatin immunoprecipitation was performed with 25 µg of cross-linked chromatin from 293T cells using 5 µg of SP1 Rabbit mAb (A19649). DNA libraries were prepared using Scale ssDNA-seq Lib Prep Kit for Illumina V2 (RK20228). The ChIP sequencing results indicate the enrichment pattern of SP1 in the representative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

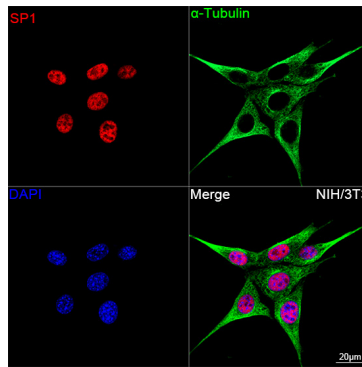


Chromatin immunoprecipitation analysis of extracts of 293T cells, using SP1 antibody (A19649) and rabbit IgG. The amount of immunoprecipitated DNA was checked by quantitative PCR. Histogram was constructed by the ratios of the immunoprecipitated DNA to the input.

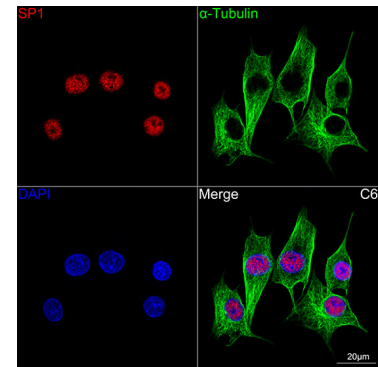
Validation Data



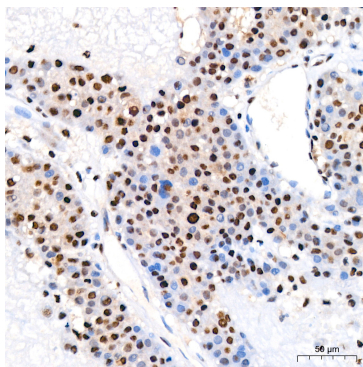
Confocal imaging of HeLa cells using SP1 Rabbit mAb (A19649, dilution 1:200) followed by a further incubation with Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). The cells were counterstained with α -Tubulin Mouse mAb (AC012, dilution 1:400) followed by incubation with ABflo® 488-conjugated Goat Anti-Mouse IgG (H+L) Ab (AS076, dilution 1:500) (Green). DAPI was used for nuclear staining (Blue). Objective: 100x.



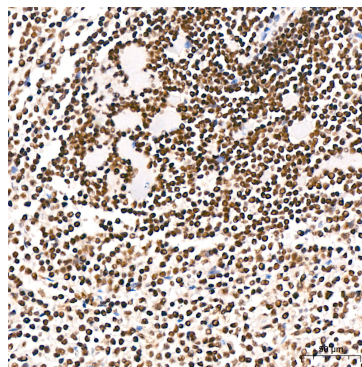
Confocal imaging of NIH/3T3 cells using SP1 Rabbit mAb (A19649, dilution 1:200) followed by a further incubation with Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). The cells were counterstained with α -Tubulin Mouse mAb (AC012, dilution 1:400) followed by incubation with ABflo® 488-conjugated Goat Anti-Mouse IgG (H+L) Ab (AS076, dilution 1:500) (Green). DAPI was used for nuclear staining (Blue). Objective: 100x.



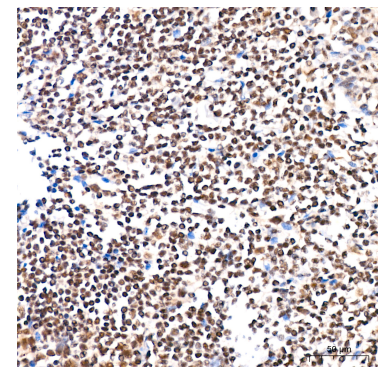
Confocal imaging of C6 cells using SP1 Rabbit mAb (A19649, at dilution of 1:100) (Red). The cells were counterstained with α -Tubulin Mouse mAb (AC012, dilution 1:400) (Green). DAPI was used for nuclear staining (blue). Objective: 100x.



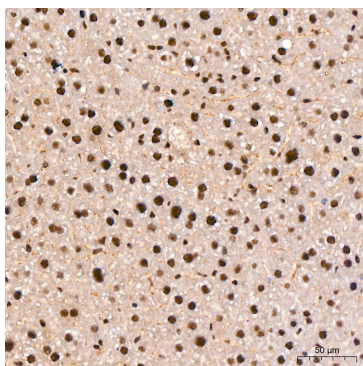
Immunohistochemistry analysis of paraffin-embedded Human liver cancer tissue using SP1 Rabbit mAb (A19649) at a dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.



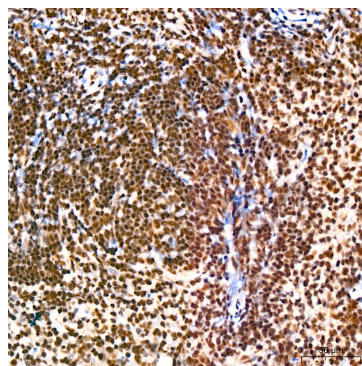
Immunohistochemistry analysis of paraffin-embedded Human spleen tissue using SP1 Rabbit mAb (A19649) at a dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.



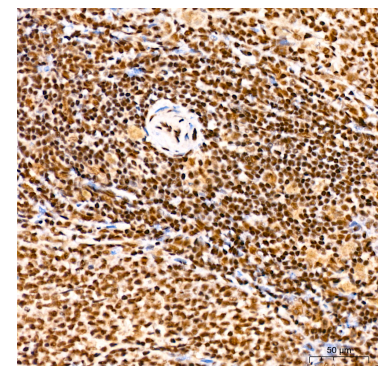
Immunohistochemistry analysis of paraffin-embedded Human tonsil tissue using SP1 Rabbit mAb (A19649) at a dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.



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.

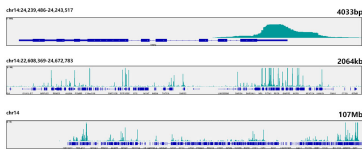


Immunohistochemistry analysis of paraffin-embedded Mouse spleen tissue using SP1 Rabbit mAb (A19649) at a dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.



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.

Validation Data



CUT&Tag was performed using the CUT&Tag Assay Kit (pAG-Tn5) for Illumina(RK20265) from 10^5 Hep G2 cells with 1 μ 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 (TNF2), as shown in figure.