

A19649

Leader in Biomolecular Solutions for Life Science



SP1 Rabbit mAb

Catalog No.: A19649

Recombinant

9 Publications

Basic Information

Observed MW

90kDa

Calculated MW

81kDa

Category

SMab Recombinant Monoclonal
Antibody

Applications

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

Cross-Reactivity

Human,Mouse,Rat

CloneNo number

ARC0128

Recommended Dilutions

WB 1:1000 - 1:2000**IHC-P** 1:200 - 1:2000**IF/ICC** 1:200 - 1:1000**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

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.

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

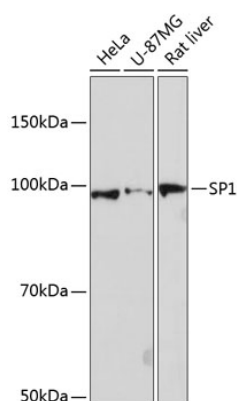
Store at -20°C. Avoid freeze / thaw cycles.

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

Contact

www.abclonal.com

Validation Data



Western blot analysis of various lysates using SP1 Rabbit mAb (A19649) at 1:1000 dilution.

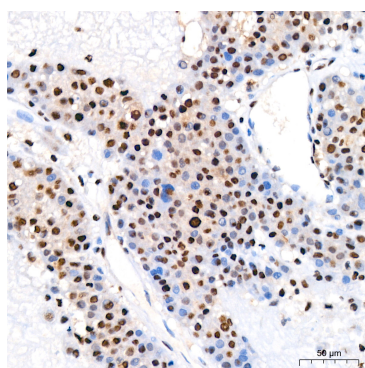
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.

Lysates/proteins: 25µg per lane.

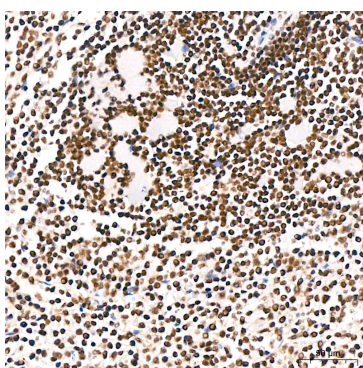
Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Basic Kit (RM00020).

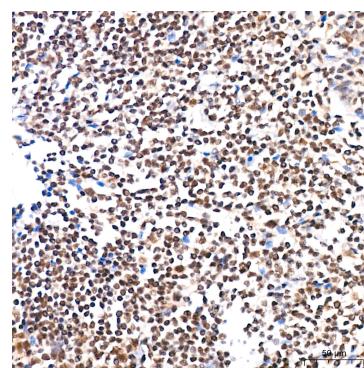
Exposure time: 90s.



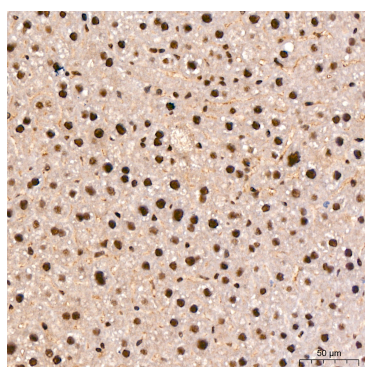
Immunohistochemistry analysis of paraffin-embedded Human liver cancer tissue using SP1 Rabbit mAb (A19649) at a dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.



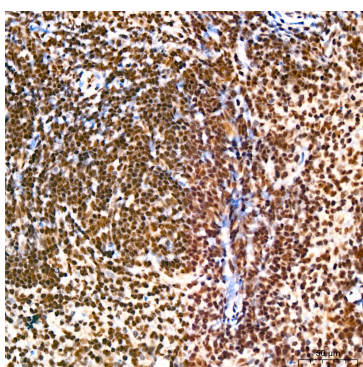
Immunohistochemistry analysis of paraffin-embedded Human spleen tissue using SP1 Rabbit mAb (A19649) at a dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.



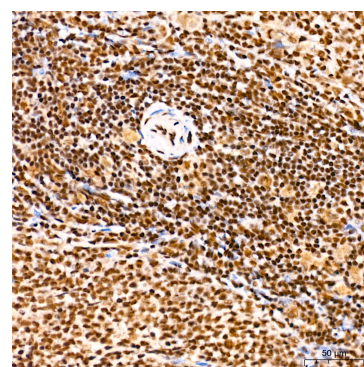
Immunohistochemistry analysis of paraffin-embedded Human tonsil tissue using SP1 Rabbit mAb (A19649) at a dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.



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.

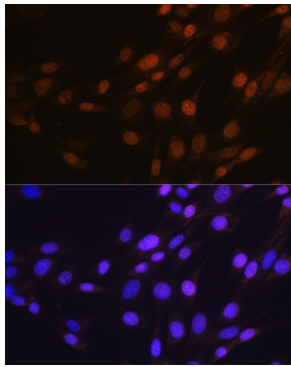


Immunohistochemistry analysis of paraffin-embedded Mouse spleen tissue using SP1 Rabbit mAb (A19649) at a dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.

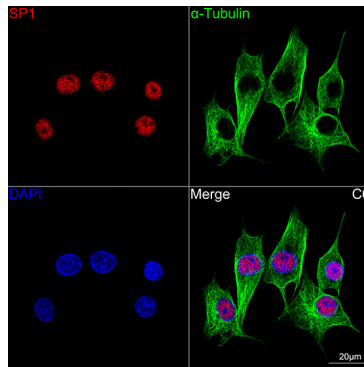


Immunohistochemistry analysis of paraffin-embedded Rat spleen tissue using SP1 Rabbit mAb (A19649) at a dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.

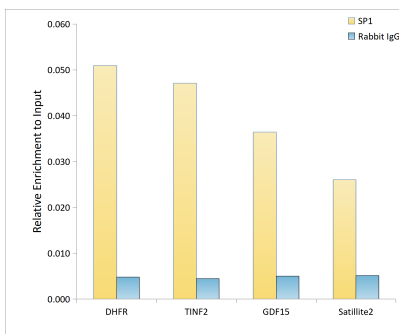
Validation Data



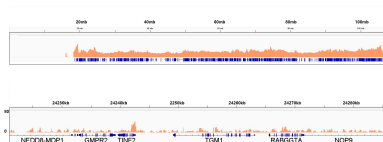
Immunofluorescence analysis of NIH-3T3 cells using SP1 Rabbit mAb (A19649) at dilution of 1:100 (40x lens). Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.



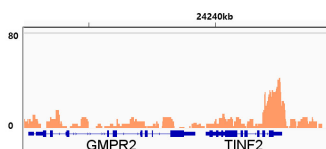
Confocal imaging of C6 cells using SP1 Rabbit mAb (A19649, at dilution of 1:100) (Red). The cells were counterstained with α -Tubulin Mouse mAb (AC012, dilution 1:400) (Green). DAPI was used for nuclear staining (blue). Objective: 100x.



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.

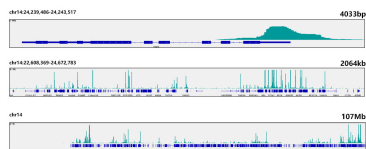


Chromatin immunoprecipitation was performed with 25 μ g of cross-linked chromatin from 293T cells using 5 μ g of SP1 Rabbit mAb (A19649). DNA libraries were prepared using Scale ssDNA-seq Lib Prep Kit for Illumina V2 (RK20228). The ChIP sequencing results indicate the enrichment pattern of SP1 across chromosome 14 (upper panel) and the genomic region encompassing TNF2, a representative gene enriched in SP1 (lower panel).



Chromatin immunoprecipitation was performed with 25 μ g of cross-linked chromatin from 293T cells using 5 μ g 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 TNF2 gene.

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 (TINF2), as shown in figure.