

SP1 Antibody
Purified Mouse Monoclonal Antibody (Mab)
Catalog # AW5076

Specification

SP1 Antibody - Product Information

Application	IF, WB, FC,E
Primary Accession	P08047
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Calculated MW	H=81 KDa
Isotype	IgG1,κ
Antigen Source	HUMAN

SP1 Antibody - Additional Information

Gene ID 6667

Other Names

Transcription factor Sp1, SP1, TSFP1

Dilution

IF~~1:25
WB~~1:1000
FC~~1:25

Target/Specificity

This SP1 antibody is generated from a mouse immunized with a recombination protein from the human SP1.

Format

Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, followed by dialysis against PBS.

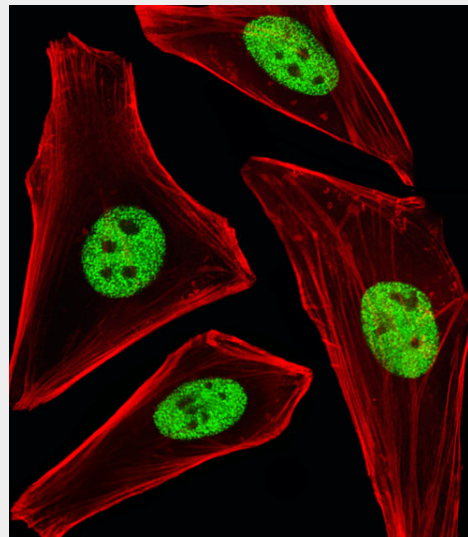
Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

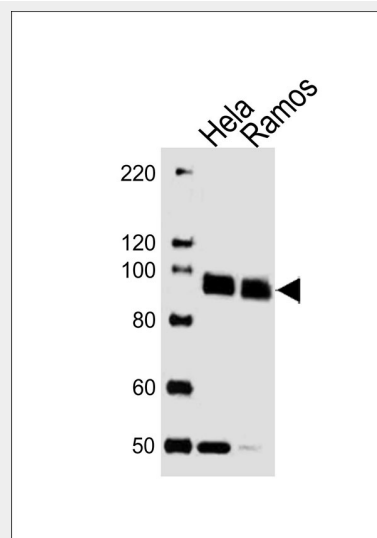
Precautions

SP1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

SP1 Antibody - Protein Information



Fluorescent image of HeLa cells stained with SP1 Antibody(Cat#AW5076). AW5076 was diluted at 1:25 dilution. An Alexa Fluor 488-conjugated goat anti-mouse IgG at 1:400 dilution was used as the secondary antibody (green). Cytoplasmic actin was counterstained with Alexa Fluor® 555 conjugated with Phalloidin (red).



Western blot analysis of lysates from HeLa,Ramos cell line (from left to right), using SP1 Antibody(Cat. #AW5076). AW5076 was

Name SP1

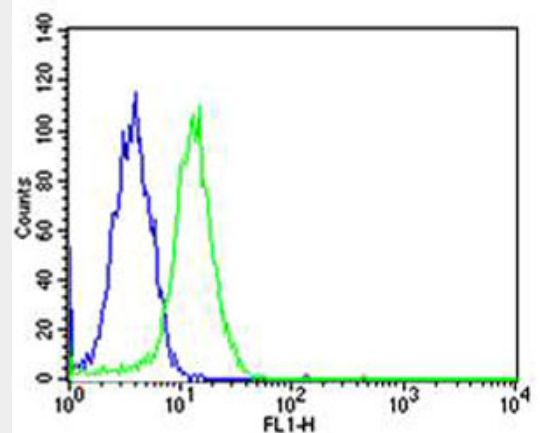
Synonyms TSFP1

Function

Transcription factor that can activate or repress transcription in response to physiological and pathological stimuli. Binds with high affinity to GC-rich motifs and regulates the expression of a large number of genes involved in a variety of processes such as cell growth, apoptosis, differentiation and immune responses. Highly regulated by post-translational modifications (phosphorylations, sumoylation, proteolytic cleavage, glycosylation and acetylation). Binds also the PDGFR-alpha G-box promoter. May have a role in modulating the cellular response to DNA damage. Implicated in chromatin remodeling. Plays an essential role in the regulation of FE65 gene expression. In complex with ATF7IP, maintains telomerase activity in cancer cells by inducing TERT and TERC gene expression. Isoform 3 is a stronger activator of transcription than isoform 1. Positively regulates the transcription of the core clock component ARNTL/BMAL1 (PubMed:10391891, PubMed:11371615, PubMed:11904305, PubMed:14593115, PubMed:16377629, PubMed:16478997, PubMed:16943418, PubMed:17049555, PubMed:18171990, PubMed:18171990,</p>
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diluted at 1:1000 at each lane. A goat anti-mouse IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody. Lysates at 20ug per lane.

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Flow cytometric analysis of HeLa cells using SP1 Antibody(green, Cat#AW5076) compared to an isotype control of mouse IgG1(blue). AW5076 was diluted at 1:25 dilution. An Alexa Fluor® 488 goat anti-mouse IgG at 1:400 dilution was used as the secondary antibody.

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SP1 Antibody - Background

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Transcription factor that can activate or repress transcription in response to physiological and pathological stimuli. Binds with high affinity to GC-rich motifs and regulates the expression of a large number of genes involved in a variety of processes such as cell growth, apoptosis, differentiation and immune responses. Highly regulated by post-translational modifications (phosphorylations, sumoylation, proteolytic cleavage, glycosylation and acetylation). Binds also the PDGFR- alpha G-box promoter. May have a role in modulating the cellular response to DNA damage. Implicated in chromatin remodeling. Plays a role in the recruitment of SMARCA4/BRG1 on the c-FOS promoter. Plays an essential role in the regulation of FE65 gene expression. In complex with ATF7IP, maintains telomerase activity in cancer cells by inducing TERT and TERC gene expression.

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SP1 Antibody - References

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Haggart M.H.,et al.Submitted (APR-2000) to the EMBL/GenBank/DBJ databases.
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role in the recruitment of SMARCA4/BRG1
on the c-FOS promoter. Plays a role in
protecting cells against oxidative stress
following brain injury by regulating the
expression of RNF112 (By similarity).

Cellular Location

Nucleus. Cytoplasm. Note=Nuclear location
is governed by glycosylated/phosphorylated
states. Insulin promotes nuclear location,
while glucagon favors cytoplasmic location

Tissue Location

Up-regulated in adenocarcinomas of the
stomach (at protein level). Isoform 3 is
ubiquitously expressed at low levels

SP1 Antibody - Protocols

Provided below are standard protocols that you
may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

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