


Anti-SP1 antibody ab157123

6 References [画像数 4](#)

製品の概要

製品名	Anti-SP1 antibody
製品の詳細	Goat polyclonal to SP1
由来種	Goat
アプリケーション	適用あり: WB, IP, IHC-P
種交差性	交差種: Mouse, Human 交差が予測される動物種: Rabbit, Goat, Horse, Chicken, Cow, Dog, Pig, Xenopus laevis, Chimpanzee, Cynomolgus monkey, Rhesus monkey, Gorilla, Common marmoset, Orangutan, Zebra finch, Xenopus tropicalis, Elephant 
免疫原	Synthetic peptide, corresponding to a region within amino acids 735-785 of Human SP1 (NP_612482.2).
ポジティブ・コントロール	WB: 293T, HeLa and Jurkat, NIH 3T3, Renca and TCMK1 whole cell lysates. IP: 293T cells. IHC-P: Human ovarian carcinoma.
特記事項	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

製品の特性

製品の状態	Liquid
保存方法	Shipped at 4°C. Store at +4°C.
バッファー	pH: 7 Preservative: 0.09% Sodium azide Constituent: 99% Tris citrate/phosphate
精製度	pH 7 to 8 Immunogen affinity purified
特記事項 (精製)	ab157123 is affinity purified using an epitope specific to SP1 immobilized on solid support.

ポリモノ
アイソタイプ

ポリクローナル
IgG

アプリケーション

The Abpromise guarantee **Abpromise保証は、次のテスト済みアプリケーションにおけるab157123の使用に適用されず**
アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
WB		1/2000 - 1/10000. Predicted molecular weight: 81 kDa.
IP		Use at 2-10 µg/mg of lysate.
IHC-P		1/1000 - 1/5000.

ターゲット情報

機能	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.
組織特異性	Up-regulated in adenocarcinomas of the stomach (at protein level).
配列類似性	Belongs to the Sp1 C2H2-type zinc-finger protein family. Contains 3 C2H2-type zinc fingers.
翻訳後修飾	Phosphorylated on multiple serine and threonine residues. Phosphorylation is coupled to ubiquitination, sumoylation and proteolytic processing. Phosphorylation on Ser-59 enhances proteolytic cleavage. Phosphorylation on Ser-7 enhances ubiquitination and protein degradation. Hyperphosphorylation on Ser-101 in response to DNA damage has no effect on transcriptional activity. MAPK1/MAPK3-mediated phosphorylation on Thr-453 and Thr-739 enhances VEGF transcription but, represses FGF2-triggered PDGFR-alpha transcription. Also implicated in the repression of RECK by ERBB2. Hyperphosphorylated on Thr-278 and Thr-739 during mitosis by MAPK8 shielding SP1 from degradation by the ubiquitin-dependent pathway. Phosphorylated in the zinc-finger domain by calmodulin-activated PKCzeta. Phosphorylation on Ser-641 by PKCzeta is critical for TSA-activated LHR gene expression through release of its repressor, p107. Phosphorylation on Thr-668, Ser-670 and Thr-681 is stimulated by angiotensin II via the AT1 receptor inducing increased binding to the PDGF-D promoter. This phosphorylation is increased in injured artery wall. Ser-59 and Thr-681 can both be dephosphorylated by PP2A during cell-cycle interphase. Dephosphorylation on Ser-59 leads to increased chromatin association during interphase and increases the transcriptional activity. On insulin stimulation, sequentially glycosylated and phosphorylated on several C-terminal serine and threonine residues.

Acetylated. Acetylation/deacetylation events affect transcriptional activity. Deacetylation leads to an increase in the expression the 12(s)-lipooxygenase gene though recruitment of p300 to the promoter.

Ubiquitinated. Ubiquitination occurs on the C-terminal proteolytically-cleaved peptide and is triggered by phosphorylation.

Sumoylated by SUMO1. Sumoylation modulates proteolytic cleavage of the N-terminal repressor domain. Sumoylation levels are attenuated during tumorigenesis. Phosphorylation mediates SP1 desumoylation.

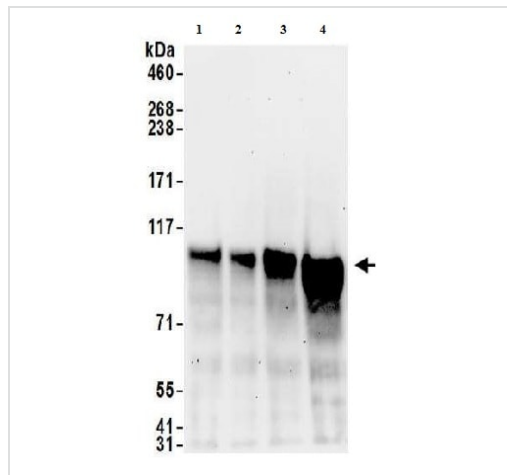
Proteolytic cleavage in the N-terminal repressor domain is prevented by sumoylation. The C-terminal cleaved product is susceptible to degradation.

O-glycosylated; contains at least 8 N-acetylglucosamine side chains. Levels are controlled by insulin and the SP1 phosphorylation states. Insulin-mediated O-glycosylation locates SP1 to the nucleus, where it is sequentially deglycosylated and phosphorylated. O-glycosylation affects transcriptional activity through disrupting the interaction with a number of transcription factors including ELF1 and NFYA. Also inhibits interaction with the HIV1 promoter. Inhibited by peroxisome proliferator receptor gamma (PPARgamma).

細胞内局在

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

画像



Western blot - Anti-SP1 antibody (ab157123)

All lanes : Anti-SP1 antibody (ab157123) at 0.1 µg/ml

Lane 1 : 293T whole cell lysate at 50 µg

Lane 2 : 293T whole cell lysate at 15 µg

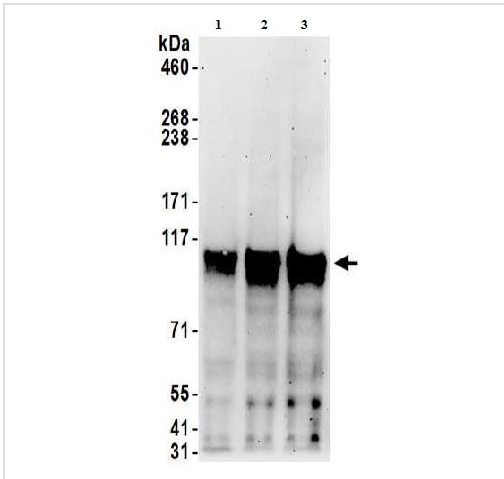
Lane 3 : HeLa whole cell lysate at 50 µg

Lane 4 : Jurkat whole cell lysate at 50 µg

Developed using the ECL technique.

Predicted band size: 81 kDa

Exposure time: 3 minutes



Western blot - Anti-SP1 antibody (ab157123)

All lanes : Anti-SP1 antibody (ab157123) at 0.4 µg/ml

Lane 1 : NIH 3T3 whole cell lysate

Lane 2 : Renca whole cell lysate

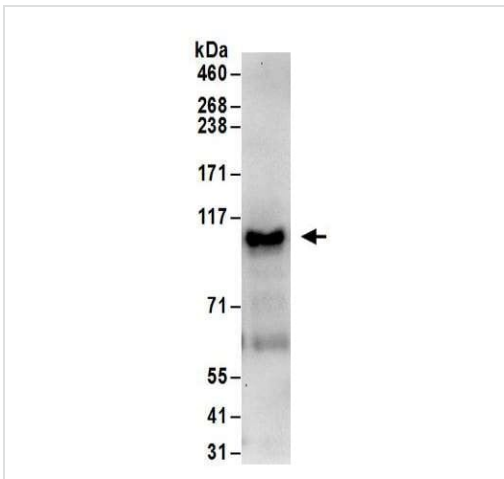
Lane 3 : TCMK1 whole cell lysate

Lysates/proteins at 50 µg per lane.

Developed using the ECL technique.

Predicted band size: 81 kDa

Exposure time: 3 minutes



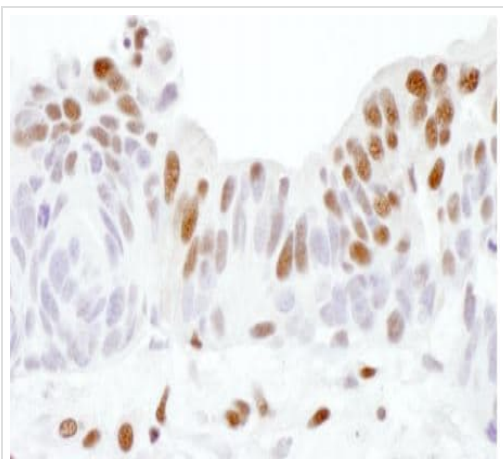
Immunoprecipitation - Anti-SP1 antibody (ab157123)

Detection of SP1 by Western Blot of Immunoprecipitate.

ab157123 at 1 µg/ml labeling SP1 in 293T whole cell lysate

immunoprecipitated using ab157123 at 6 µg/mg lysate (1 mg/IP; 20% of IP loaded/lane).

Detection: Chemiluminescence with exposure time of 30 seconds.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SP1 antibody (ab157123)

Paraffin embedded human ovarian carcinoma tissue stained for SP1 using ab157123 at 1/5000 dilution in immunohistochemical analysis.

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