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Goat Anti-SP1 Antibody

Peptide-affinity purified goat antibody
Catalog # AF2028a

Specification

Goat Anti-SP1 Antibody - Product Information

Application	**WB, E**
Primary Accession	P08047
Other Accession	NP_003100, 6667
Reactivity	**Human, Mouse**
Predicted	**Rat, Pig, Dog**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**100ug/200ul**
Isotype	**IgG**
Calculated MW	**80693**

Goat Anti-SP1 Antibody - Additional Information

Gene ID 6667

Other Names
Transcription factor Sp1, SP1, TSFP1

Dilution
WB~~1:1000
E~~N/A

Format
0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Goat Anti-SP1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-SP1 Antibody - Protein Information

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). Also binds 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 BMAL1 (PubMed:10391891, PubMed:11371615, PubMed:11904305, PubMed:14593115, PubMed:16377629, PubMed:16478997, PubMed:16943418, PubMed:17049555, PubMed:18171990, PubMed:18199680, PubMed:18239466, PubMed:18513490, PubMed:18619531, PubMed:19193796, PubMed:20091743, PubMed:21046154, PubMed:21798247). Plays a 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

Goat Anti-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 Cytomety
- Cell Culture

Goat Anti-SP1 Antibody - Images

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AF2028a staining (0.3 µg/ml) of Hela lysate (RIPA buffer, 30 µg total protein per lane). Primary incubated for 1 hour. Detected by western blot using chemiluminescence.

Goat Anti-SP1 Antibody - References

Inhibition of NFkappaB and pancreatic cancer cell and tumor growth by curcumin is dependent on specificity protein down-regulation. Jutooru I, et al. J Biol Chem, 2010 Aug 13. PMID 20538607.
Sp1 binds to the external promoter of the p73 gene and induces the expression of TAp73gamma in lung cancer. Logotheti S, et al. FEBS J, 2010 Jul. PMID 20528922.
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Transcription factor Sp1 regulates expression of cancer-associated molecule CD147 in human lung cancer. Kong LM, et al. Cancer Sci, 2010 Jun. PMID 20384626.
HDAC4 inhibits the transcriptional activation of mda-7/IL-24 induced by Sp1. Pan L, et al. Cell Mol Immunol, 2010 May. PMID 20383178.