

SP1 Antibody
Rabbit mAb
Catalog # AP91041**Specification**

SP1 Antibody - Product Information

Application	WB, IHC, ICC
Primary Accession	P08047
Clonality	Monoclonal
Other Names	
TSFP1; Transcription factor SP1; transcription factor Sp1;	

Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	80693 Da

SP1 Antibody - Additional Information

Dilution	WB~~1:1000 IHC~~1:100~500 ICC~~N/A
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human SP1
Description	SP1 is a transcription factor of the Sp1 C2H2-type zinc-finger protein family. Phosphorylated and activated by MAPK. Dephosphorylation by PTEN inhibits DNA binding. Binds to p38 in the nucleus.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

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

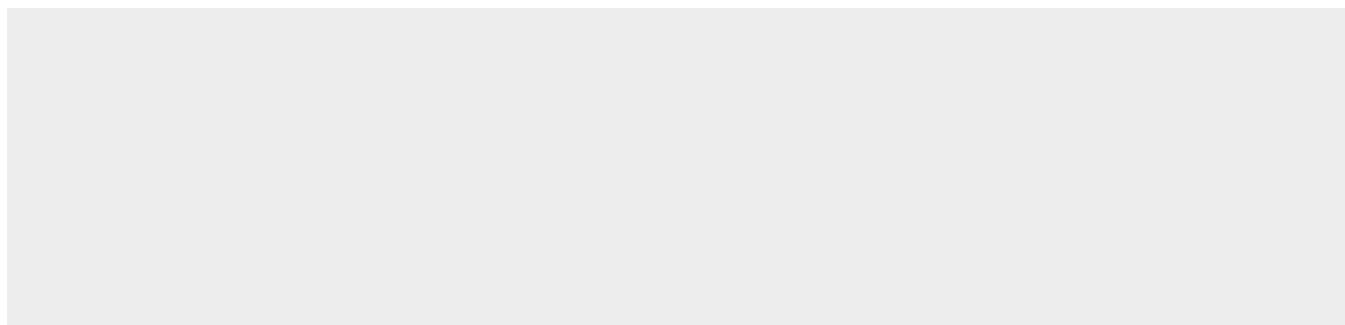
Up-regulated in adenocarcinomas of the stomach (at protein level). Isoform 3 is ubiquitously expressed at low levels

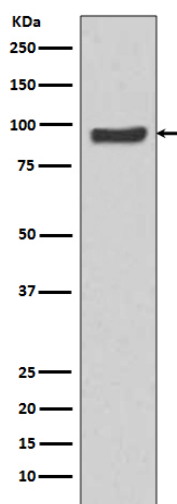
SP1 Antibody - Protocols

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](#)

SP1 Antibody - Images





Western blot analysis of SP1 expression in HeLa cell lysate.