

**SP1 Antibody (Internal)**  
**Rabbit Polyclonal Antibody**  
**Catalog # ALS11829****Specification****SP1 Antibody (Internal) - Product Information**

Application	WB, IHC
Primary Accession	<a href="#">P08047</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	81kDa KDa

**SP1 Antibody (Internal) - Additional Information****Gene ID** 6667**Other Names**

Transcription factor Sp1, SP1, TSFP1

**Target/Specificity**

Peptide mapping to internal domain of human Sp1

**Reconstitution & Storage**

+4°C, avoid freezing

**Precautions**

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

**SP1 Antibody (Internal) - 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). 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 BMAL1 (PubMed:[10391891](http://www.uniprot.org/citations/10391891), PubMed:[10391891](http://www.ncbi.nlm.nih.gov/pubmed/10391891))

href="http://www.uniprot.org/citations/11371615" target="\_blank">>11371615</a>, PubMed:<a href="http://www.uniprot.org/citations/11904305" target="\_blank">>11904305</a>, PubMed:<a href="http://www.uniprot.org/citations/14593115" target="\_blank">>14593115</a>, PubMed:<a href="http://www.uniprot.org/citations/16377629" target="\_blank">>16377629</a>, PubMed:<a href="http://www.uniprot.org/citations/16478997" target="\_blank">>16478997</a>, PubMed:<a href="http://www.uniprot.org/citations/16943418" target="\_blank">>16943418</a>, PubMed:<a href="http://www.uniprot.org/citations/17049555" target="\_blank">>17049555</a>, PubMed:<a href="http://www.uniprot.org/citations/18171990" target="\_blank">>18171990</a>, PubMed:<a href="http://www.uniprot.org/citations/18199680" target="\_blank">>18199680</a>, PubMed:<a href="http://www.uniprot.org/citations/18239466" target="\_blank">>18239466</a>, PubMed:<a href="http://www.uniprot.org/citations/18513490" target="\_blank">>18513490</a>, PubMed:<a href="http://www.uniprot.org/citations/18619531" target="\_blank">>18619531</a>, PubMed:<a href="http://www.uniprot.org/citations/19193796" target="\_blank">>19193796</a>, PubMed:<a href="http://www.uniprot.org/citations/20091743" target="\_blank">>20091743</a>, PubMed:<a href="http://www.uniprot.org/citations/21798247" target="\_blank">>21798247</a>, PubMed:<a href="http://www.uniprot.org/citations/21046154" target="\_blank">>21046154</a>). 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

#### **Volume**

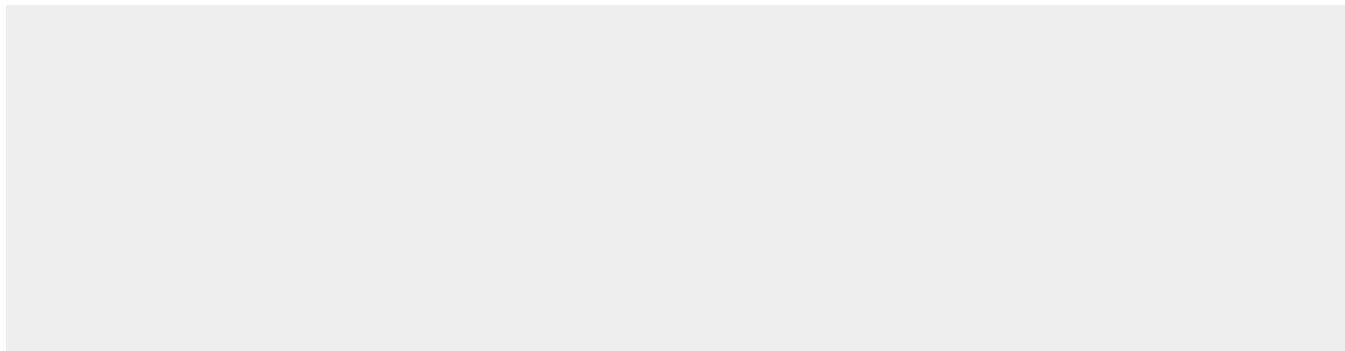
50 µl

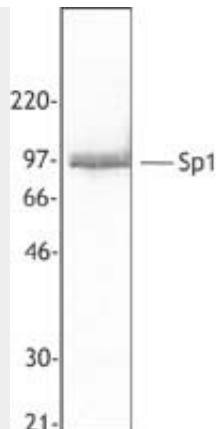
### **SP1 Antibody (Internal) - Protocols**

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

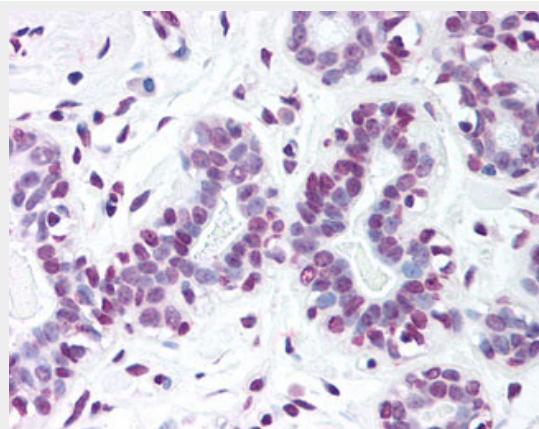
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### **SP1 Antibody (Internal) - Images**





Jurkat cell extract was resolved by electrophoresis, transferred to nitrocellulose, and probed...



Anti-SP1 antibody IHC of human breast.

#### **SP1 Antibody (Internal) - Background**

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. Isoform 3 is a stronger activator of transcription than isoform 1. Positively regulates the transcription of the core clock component ARNTL/BMAL1.

#### **SP1 Antibody (Internal) - References**

- Infantino V., et al. Biochem. Biophys. Res. Commun. 412:86-91(2011).  
Scherer S.E., et al. Nature 440:346-351(2006).  
Mural R.J., et al. Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases.  
Haggart M.H., et al. Submitted (APR-2000) to the EMBL/GenBank/DDBJ databases.  
Takahara T., et al. J. Biol. Chem. 275:38067-38072(2000).