

# SP1 Rabbit mAb

Catalog # AP76111

### **Product Information**

| Application       | WB, IHC-P, IHC-F, IP, ICC |
|-------------------|---------------------------|
| Primary Accession | <u>P08047</u>             |
| Reactivity        | Human                     |
| Host              | Rabbit                    |
| Clonality         | Monoclonal Antibody       |
| Calculated MW     | 80693                     |

### **Additional Information**

| Gene ID     | 6667  |
|-------------|---|
| Other Names | SP1   |
| Dilution    | WB~~1/500-1/1000 IHC-P~~N/A IHC-F~~N/A IP~~N/A ICC~~N/A |
| Format      | Liquid  |

#### **Protein Information**

| Name     | SP1   |
|----------|---|
| Synonyms | TSFP1   |
| Function | Transcription factor that can activate or repress transcription in response to<br>physiological and pathological stimuli. Binds with high affinity to GC-rich<br>motifs and regulates the expression of a large number of genes involved in a<br>variety of processes such as cell growth, apoptosis, differentiation and<br>immune responses. Highly regulated by post-translational modifications<br>(phosphorylations, sumoylation, proteolytic cleavage, glycosylation and<br>acetylation). Also binds the PDGFR-alpha G-box promoter. May have a role in<br>modulating the cellular response to DNA damage. Implicated in chromatin<br>remodeling. Plays an essential role in the regulation of FE65 gene expression.<br>In complex with ATF7IP, maintains telomerase activity in cancer cells by<br>inducing TERT and TERC gene expression. Isoform 3 is a stronger activator of<br>transcription than isoform 1. Positively regulates the transcription of the core<br>clock component BMAL1 (PubMed: <u>10391891</u> , PubMed: <u>11371615</u> ,<br>PubMed: <u>11904305</u> , PubMed: <u>16943418</u> , PubMed: <u>17049555</u> ,<br>PubMed: <u>18171990</u> , PubMed: <u>18199680</u> , PubMed: <u>18239466</u> ,<br>PubMed: <u>18513490</u> , PubMed: <u>18619531</u> , PubMed: <u>19193796</u> ,<br>PubMed: <u>18513490</u> , PubMed: <u>18619531</u> , PubMed: <u>21798247</u> ). Plays a role in the<br>recruitment of SMARCA4/BRG1 on the c-FOS promoter. Plays a role in the<br>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<br>glycosylated/phosphorylated states. Insulin promotes nuclear location, while<br>glucagon favors cytoplasmic location |
| Tissue Location   | Up-regulated in adenocarcinomas of the stomach (at protein level). Isoform 3 is ubiquitously expressed at low levels   |

## Images





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