10320 Camino Santa Fe, Suite G San Diego, CA 92121 Tel: 858.875.1900 Fax: 858.875.1999



# SP1 Rabbit mAb

Catalog # AP76110

### **Product Information**

**Application** WB, IHC-P, IHC-F, ICC

Primary Accession P08047

**Reactivity** Human, Mouse

**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 ICC~~N/A

Format Liquid

#### **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:<u>10391891</u>, PubMed:<u>11371615</u>, PubMed:<u>11904305</u>, PubMed:<u>14593115</u>, PubMed:<u>16377629</u>,

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

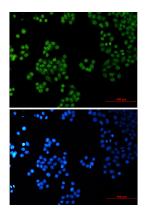
glycosylated/phosphorylated states. Insulin promotes nuclear location, while

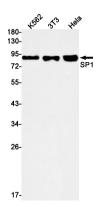
glucagon favors cytoplasmic location

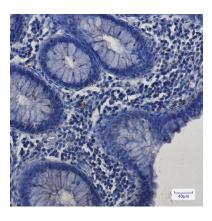
**Tissue Location** Up-regulated in adenocarcinomas of the stomach (at protein level). Isoform 3

is ubiquitously expressed at low levels

# **Images**







Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.