

For Research Use Only

# SP1 Monoclonal antibody

Catalog Number: 66508-1-Ig 6 Publications



## Basic Information

<b>Catalog Number:</b> 66508-1-Ig	<b>GenBank Accession Number:</b> BC062539	<b>Purification Method:</b> Protein G purification
<b>Size:</b> 150ul, Concentration: 1100 ug/ml by 6667 Nanodrop and 1000 ug/ml by Bradford method using BSA as the standard;	<b>GeneID (NCBI):</b> 6667	<b>CloneNo.:</b> 4G3H3
<b>Source:</b> Mouse	<b>ENSEMBL Gene ID:</b> ENSG00000185591	<b>Recommended Dilutions:</b> WB: 1:1000-1:6000 IHC: 1:175-1:700 IF-P: 1:50-1:500 IF/ICC: 1:400-1:1600 FC (Intra): 0.40 ug per 10 <sup>6</sup> cells in a 100 µl suspension
<b>Isotype:</b> IgG1	<b>UNIPROT ID:</b> P08047	
<b>Immunogen Catalog Number:</b> AG16720	<b>Full Name:</b> Sp1 transcription factor	
	<b>Calculated MW:</b> 785 aa, 81 kDa	
	<b>Observed MW:</b> 95-105 kDa, 60-65 kDa	

## Applications

<b>Tested Applications:</b> WB, IHC, IF/ICC, IF-P, FC (Intra), ELISA	<b>Positive Controls:</b> <b>WB :</b> Jurkat cells, NIH/3T3 cells, HEK-293 cells, HeLa cells <b>IHC :</b> human lung cancer tissue, human colon cancer tissue <b>IF-P :</b> human colon cancer tissue, <b>IF/ICC :</b> HEK-293 cells, <b>FC (Intra) :</b> HEK-293 cells,
<b>Cited Applications:</b> WB, IHC, IF	
<b>Species Specificity:</b> human, mouse, rat	
<b>Cited Species:</b> human, mouse, rat	
<b>Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0</b>	

## Background Information

The transcription factor Sp1 is a C2H2 zinc-finger protein that is involved in the regulation of a wide variety of genes, including housekeeping genes and tumor-developing genes. It is associated with tumor development, growth, and metastasis [PMID: 16209919]. It regulates the expression of a large number of genes involved in a variety of processes such as cell growth, apoptosis, differentiation and immune responses. Besides, it has a role in modulating the cellular response to DNA damage, recruiting SMARCA4/BRG1 on the c-FOS promoter, regulation of FE65 gene expression [PMID:11371615,16332679]. SP1 has some isoforms with MW ~95-106 kDa and ~60 kDa [PMID:17462816].

## Notable Publications

Author	Pubmed ID	Journal	Application
Shaoheng Li	34811737	Br J Pharmacol	WB
Huanhuan Zhang	34777538	Evid Based Complement Alternat Med	IHC
Chengfei Xu	39448865	EMBO Rep	IF

## Storage

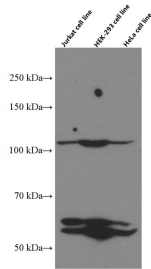
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol, pH7.3  
Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

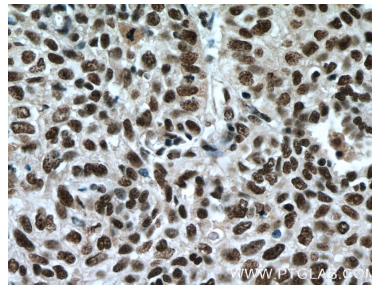
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

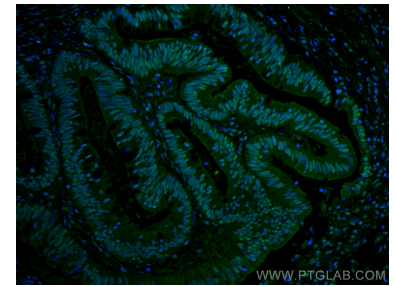
## Selected Validation Data



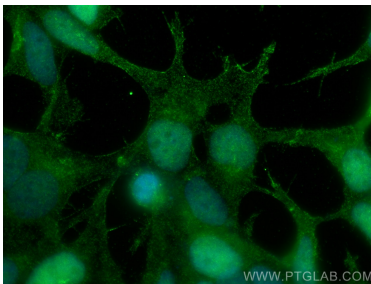
Various cells were subjected to SDS PAGE followed by western blot with 66508-1-Ig (SP1 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



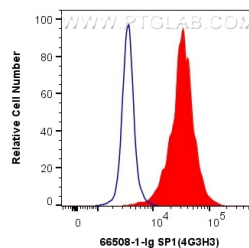
Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 66508-1-Ig (SP1 antibody) at dilution of 1:350 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed human colon cancer tissue using SP1 antibody (66508-1-Ig, Clone: 4G3H3) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



Immunofluorescent analysis of (4% PFA) fixed HEK-293 cells using SP1 antibody (66508-1-Ig, Clone: 4G3H3) at dilution of 1:800 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



1X10<sup>6</sup> HEK-293 cells were intracellularly stained with 0.4 ug Anti-Human SP1 (66508-1-Ig, Clone:4G3H3) and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Mouse IgG1 Isotype Control (MOPC-21) (65124-1-Ig, Clone: MOPC-21) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).