### For Research Use Only

# SP1 Monoclonal antibody

Catalog Number: 66508-1-lg 6 Publications



#### **Basic Information**

Catalog Number: GenBank Accession Number:

66508-1-lg BC062539
Size: GeneI D (NCBI):
150ul , Concentration: 1100 ug/ml by 6667

Nanodrop and 1000 ug/ml by Bradford ENSEMBL Gene ID: method using BSA as the standard; ENSG00000185591

Source: UNIPROT ID:
Mouse P08047
Isotype: Full Name:

IgG1 Sp1 transcription factor

Immunogen Catalog Number: Calculated MW: AG16720 785 aa, 81 kDa

Observed MW: 95-105 kDa, 60-65 kDa

**Applications** 

**Tested Applications:** 

WB, IHC, IF/ICC, IF-P, FC (Intra), ELISA

Cited Applications: WB, IHC, IF Species Specificity:

human, mouse, rat Cited Species:

human, mouse, rat

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0 Positive Controls

WB: Jurkat cells, NIH/3T3 cells, HEK-293 cells, HeLa

**Purification Method:** 

Protein A purification

Recommended Dilutions:

WB 1:1000-1:6000

IF/ICC 1:400-1:1600

IHC 1:175-1:700

IF-P 1:50-1:500

CloneNo.:

4G3H3

cells

IHC: human lung cancer tissue, human colon cancer

tissue

IF-P: human colon cancer tissue,

IF/ICC: HEK-293 cells,

# **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 pH 7.3.

Aliquoting is unnecessary for -20°C storage

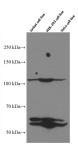
\*\*\* 20ul sizes contain 0.1% BSA

For technical support and original validation data for this product please contact:

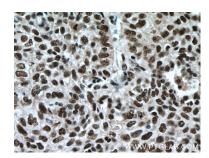
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

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



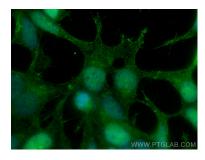
Various cells were subjected to SDS PAGE followed by western blot with 66508-1-Ig (SP1 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours



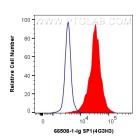
Immunohistochemical analysis of paraffinembedded human lung cancer tissue slide using 66508-1-Ig (SP1 antibody) at dilution of 1:350 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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



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



1X10^6 HEK-293 cells were intracellularly stained with 0.4 ug Anti-Human SP1 (66508-1-Ig, Clone:4G3H3) and Coralite® 488-Conjugated 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).