

## Sp1 Polyclonal Antibody

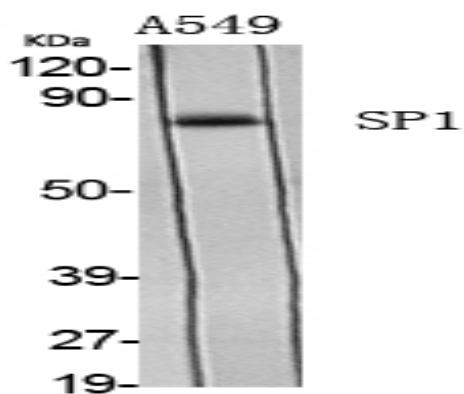
<b>Catalog No :</b>	YT4372
<b>Reactivity :</b>	Human;Mouse;Rat
<b>Applications :</b>	WB;IHC;IF;ELISA
<b>Target :</b>	Sp1
<b>Fields :</b>	>>Endocrine resistance;>>Mitophagy - animal;>>TGF-beta signaling pathway;>>Estrogen signaling pathway;>>Cortisol synthesis and secretion;>>Parathyroid hormone synthesis, secretion and action;>>Cushing syndrome;>>Huntington disease;>>Spinocerebellar ataxia;>>Human cytomegalovirus infection;>>Pathways in cancer;>>Transcriptional misregulation in cancer;>>Breast cancer;>>Choline metabolism in cancer;>>Diabetic cardiomyopathy
<b>Gene Name :</b>	SP1
<b>Protein Name :</b>	Transcription factor Sp1
<b>Human Gene Id :</b>	6667
<b>Human Swiss Prot No :</b>	P08047
<b>Mouse Gene Id :</b>	20683
<b>Mouse Swiss Prot No :</b>	O89090
<b>Rat Gene Id :</b>	24790
<b>Rat Swiss Prot No :</b>	Q01714
<b>Immunogen :</b>	The antiserum was produced against synthesized peptide derived from human SP1. AA range:706-755
<b>Specificity :</b>	Sp1 Polyclonal Antibody detects endogenous levels of Sp1 protein.
<b>Formulation :</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

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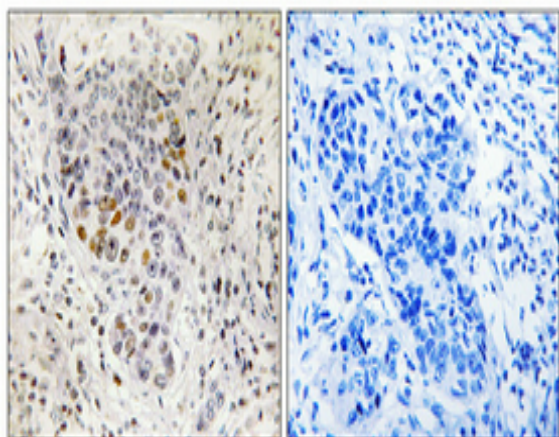
<b>Source :</b>	Polyclonal, Rabbit,IgG
<b>Dilution :</b>	WB 1:500 - 1:2000. IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:20000. Not yet tested in other applications.
<b>Purification :</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Concentration :</b>	1 mg/ml
<b>Storage Stability :</b>	-15°C to -25°C/1 year(Do not lower than -25°C)
<b>Observed Band :</b>	85kD
<b>Cell Pathway :</b>	TGF-beta;Huntington's disease;
<b>Background :</b>	The protein encoded by this gene is a zinc finger transcription factor that binds to GC-rich motifs of many promoters. The encoded protein is involved in many cellular processes, including cell differentiation, cell growth, apoptosis, immune responses, response to DNA damage, and chromatin remodeling. Post-translational modifications such as phosphorylation, acetylation, glycosylation, and proteolytic processing significantly affect the activity of this protein, which can be an activator or a repressor. Three transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Nov 2014],
<b>Function :</b>	function:Binds to GC box promoters elements and selectively activates mRNA synthesis from genes that contain functional recognition sites. Can interact with G/C-rich motifs from serotonin receptor promoter.,PTM:O-glycosylated; contains N-acetylglucosamine side chains.,similarity:Belongs to the Sp1 C2H2-type zinc-finger protein family.,similarity:Contains 3 C2H2-type zinc fingers.,subunit:Interacts with ATF7IP, ATF7IP2, POGZ, HCFC1, AATF and PHC2. Interacts with varicella-zoster virus IE62 protein and HIV-1 Vpr. Interacts with SV40 VP2/3 proteins. Interacts with SV40 major capsid protein VP1; this interaction leads to a cooperativity between the two proteins in DNA binding.,
<b>Subcellular Location :</b>	Nucleus. Cytoplasm. Nuclear location is governed by glycosylated/phosphorylated states. Insulin promotes nuclear location, while glucagon favors cytoplasmic location.
<b>Expression :</b>	Up-regulated in adenocarcinomas of the stomach (at protein level). Isoform 3 is ubiquitously expressed at low levels.

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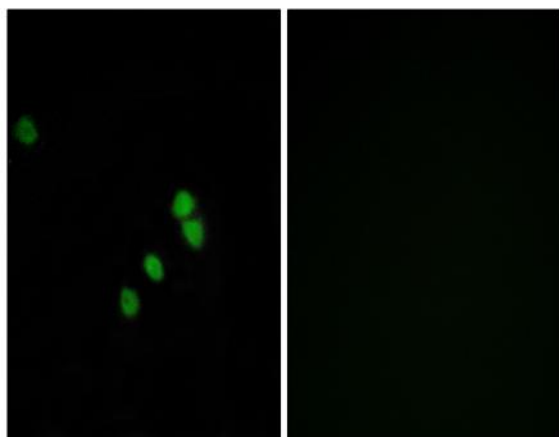
## Products Images



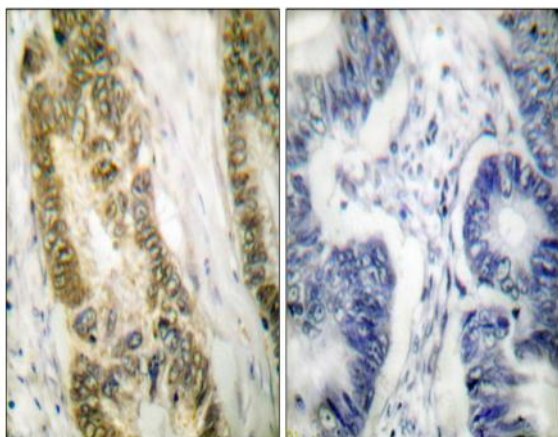
Western Blot analysis of various cells using Sp1 Polyclonal Antibody



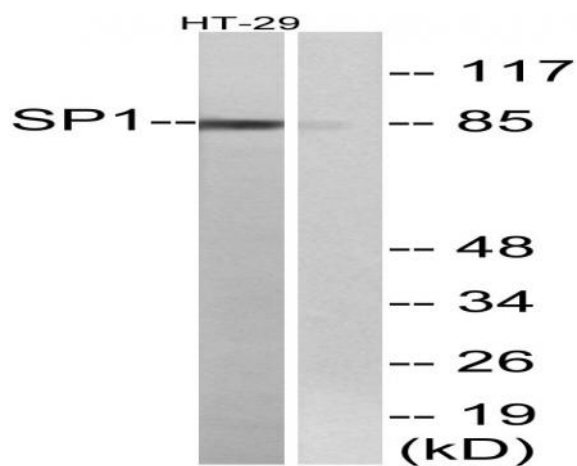
Immunohistochemical analysis of paraffin-embedded Human lung cancer. Antibody was diluted at 1:100(4° overnight). High-pressure and temperature Tris-EDTA, pH8.0 was used for antigen retrieval. Negative control (right) obtained from antibody was pre-absorbed by immunogen peptide.



Immunofluorescence analysis of HepG2 cells, using SP1 Antibody. The picture on the right is blocked with the synthesized peptide.



Immunohistochemistry analysis of paraffin-embedded human colon carcinoma tissue, using SP1 Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from HT-29 cells, using SP1 Antibody. The lane on the right is blocked with the synthesized peptide.