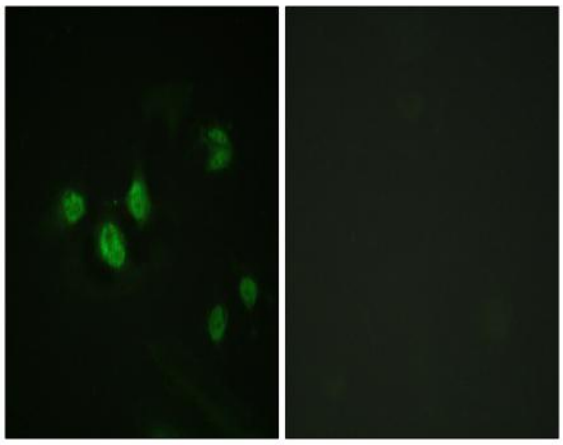
Best Tools for immunology Research

Sp1 (phospho Thr453) Polyclonal Antibody

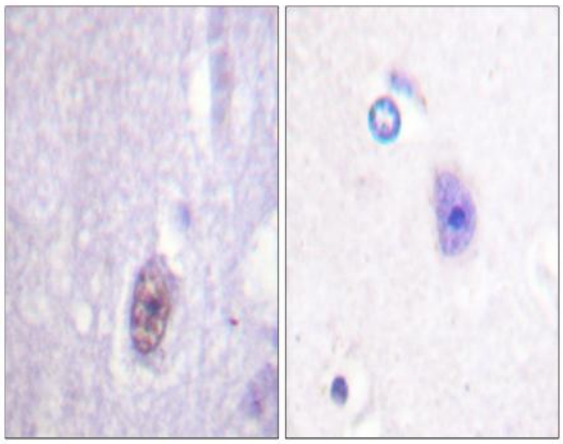
Catalog No :	YP0247
Reactivity :	Human;Mouse;Rat
Applications :	WB;IHC;IF;ELISA
Target :	Sp1
Fields :	>>Endocrine resistance;>>Mitophagy - animal;>>TGF-beta signaling pathway;>>Estrogen signaling pathway;>>Cortisol synthesis and secretion;>>Parathyroid hormone synthesis, secretion and action;>>Cushing syndrome;>>Huntington disease;>>Spinocerebellar ataxia;>>Human cytomegalovirus infection;>>Pathways in cancer;>>Transcriptional misregulation in cancer;>>Breast cancer;>>Choline metabolism in cancer;>>Diabetic cardiomyopathy
Gene Name :	SP1
Protein Name :	Transcription factor Sp1
Human Gene Id :	6667
Human Swiss Prot No :	P08047
Mouse Gene Id :	20683
Mouse Swiss Prot No :	O89090
Rat Gene Id :	24790
Rat Swiss Prot No :	Q01714
Immunogen :	The antiserum was produced against synthesized peptide derived from human SP1 around the phosphorylation site of Thr453. AA range:421-470
Specificity :	Phospho-Sp1 (T453) Polyclonal Antibody detects endogenous levels of Sp1 protein only when phosphorylated at T453.
	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source/Formulation :	Polyclonal, Rabbit,IgG
Dilution :	WB 1:500 - 1:2000. IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:5000. Not yet tested in other applications.
Purification :	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Concentration :	1 mg/ml
Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)
Observed Band :	90kD
Cell Pathway :	TGF-beta;Huntington's disease;
Background :	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],
Function :	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.,
Subcellular Location :	Nucleus. Cytoplasm. Nuclear location is governed by glycosylated/phosphorylated states. Insulin promotes nuclear location, while glucagon favors cytoplasmic location.
Expression :	Up-regulated in adenocarcinomas of the stomach (at protein level). Isoform 3 is ubiquitously expressed at low levels.

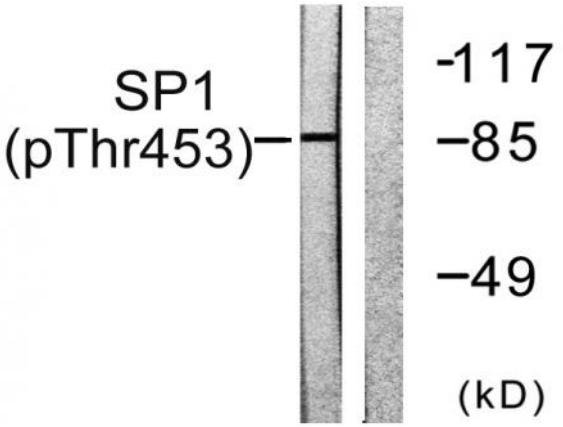
Products Images



Immunofluorescence analysis of HeLa cells, using SP1 (Phospho-Thr453) Antibody. The picture on the right is blocked with the phospho peptide.



Immunohistochemistry analysis of paraffin-embedded human brain, using SP1 (Phospho-Thr453) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from A549 cells, using SP1 (Phospho-Thr453) Antibody. The lane on the right is blocked with the phospho peptide.