



Sp1 (phospho Thr453) Polyclonal Antibody

Catalog No	BYab-01276
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB;IHC;IF;ELISA
Gene Name	SP1
Protein Name	Transcription factor Sp1
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.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/5000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	SP1; TSFP1; Transcription factor Sp1
Observed Band	90kD
Cell Pathway	Nucleus. Cytoplasm. Nuclear location is governed by glycosylated/phosphorylated states. Insulin promotes nuclear location, while glucagon favors cytoplasmic location.
Tissue Specificity	Up-regulated in adenocarcinomas of the stomach (at protein level). Isoform 3 is ubiquitously expressed at low levels.
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

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interaction leads to a cooperativity between the two proteins in DNA binding.,

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],

matters needing attention

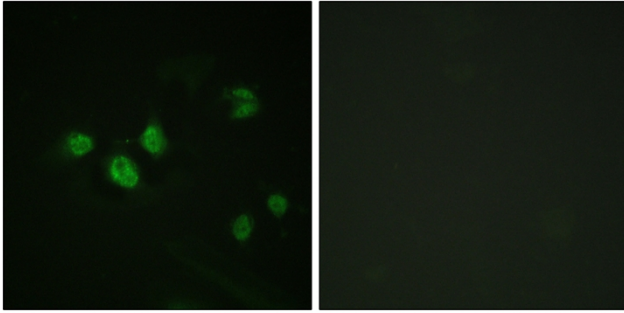
Avoid repeated freezing and thawing!

Usage suggestions

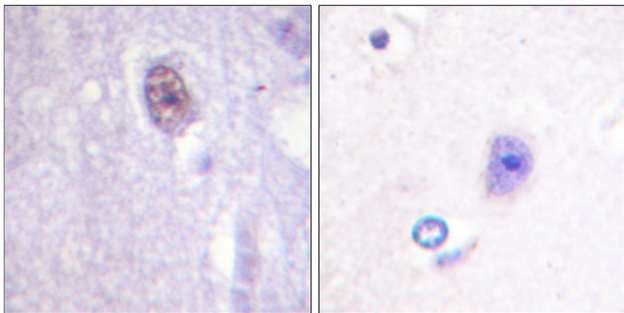
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



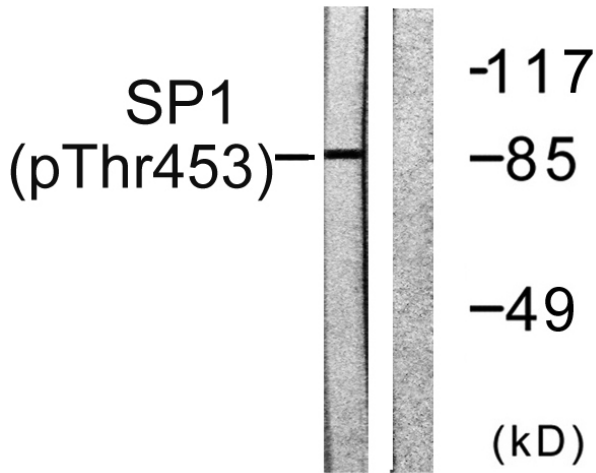
Products Images



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.