

# Phospho SP1 (Thr453) Antibody

rev 12/19

CATALOG NO.: A1979-100 (100 µl)

**BACKGROUND DESCRIPTION:** 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.

**ALTERNATE NAMES:** TSFP1; Transcription factor Sp1

**ANTIBODY TYPE:** Polyclonal

**HOST/ISOTYPE:** Rabbit / IgG

**IMMUNOGEN:** KLH-conjugated synthetic peptide targeting a sequence within the center region of human SP1

**MOLECULAR WEIGHT:** 90 kDa

**PURIFICATION:** Affinity purified

**FORM:** Liquid

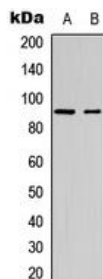
**FORMULATION:** In 0.42% Potassium phosphate; 0.87% NaCl; pH 7.3; 30% glycerol; and 0.01% sodium azide

**SPECIES REACTIVITY:** Human, Mouse, Monkey, Chicken, Rat, Bovine

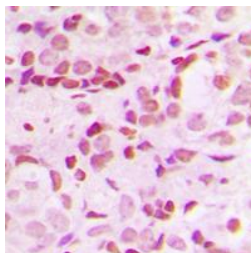
**STORAGE CONDITIONS:** Store at -20°C. Avoid freeze / thaw cycles

**APPLICATIONS AND USAGE:** WB 1:500 - 1:1000, IHC 1:100 - 1:200, IF 1:100 - 1:500, ChIP (Use at an assay dependent concentration)

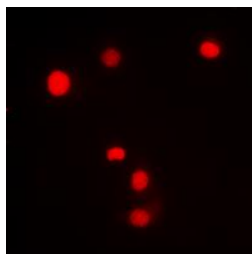
**Note:** This information is only intended as a guide. The optimal dilutions must be determined by the user



Western blot analysis of phospho SP1 (Thr453) expression in Jurkat (A); mouse melanoma cancer (B) whole cell lysates.



Immunohistochemical analysis of phospho SP1 (Thr453) staining in human breast cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0), then incubated with the antibody at RT and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with hematoxylin and mounted with DPX.



Immunofluorescent analysis of phospho SP1 (Thr453) staining in Jurkat cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at RT. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 C in a humidified chamber. Cells were washed with PBST and incubated with a DyLight 594-conjugated secondary antibody (red) in PBS at RT in the dark. DAPI was used to stain the cell nuclei (blue).

**RELATED PRODUCTS:**

Anti-TGF- $\beta$ 1 Antibody (3D9) (A1338)  
Smad1 Antibody (3461)  
C-Myc Antibody (6767)  
HDAC1 Antibody (3601)

***FOR RESEARCH USE ONLY! Not to be used on humans.***