

35-1095: Polyclonal Antibody to p53 (Phospho-Ser37)

Clonality :	Polyclonal
Application :	WB,IF
Reactivity :	Human
Gene :	TP53
Gene ID :	7157
Uniprot ID :	P04637
Format :	Purified
Alternative Name :	Tumor suppressor p53, Phosphoprotein p53, Antigen NY-CO-13, TP53
Isotype :	Rabbit IgG
Immunogen Information :	Peptide sequence around phosphorylation site of serine 37 (L-P-S(p)-Q-A) derived from Human p53.

Description

p53 is a nuclear protein which plays an essential role in the regulation of cell cycle specifically in the transition from G0 to G1. It is found in very low levels in normal cells however in a variety of transformed cell lines in high amounts and believed to contribute to transformation and malignancy. The open reading frame of p53 is 393 amino acids long, with the central region (consisting of amino acids from about 100 to 300) containing the DNA-binding domain. This proteolysis-resistant core is flanked by a C-terminal end mediating oligomerization and an N-terminal end containing a strong transcription activation signal. p53 binds as a tetramer to a PBS (p53-Binding Site) and activates the expression of downstream genes that inhibit growth and/or invasion. p53 binds as a tetramer to a p53-binding site (PBS) and to activate the expression of adjacent genes that inhibit growth and/or invasion. Deletion of one or both p53 alleles reduces the expression of tetramers, resulting in decreased expression of the growth inhibitory genes Ito, A. et al. (2001) EMBO J. 20, 1331-1340. Sakaguchi, K. et al. (1998) Genes Dev. 12, 2831-2841. Solomon, J.M. et al. (2006) Mol. Cell. Biol. 26, 28-38.

Product Info

Amount :	50 µl / 100 µl
Content :	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg ²⁺ and Ca ²⁺), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage condition :	Store the antibody at 4°C, stable for 6 months. For long-term storage, store at -20°C. Avoid repeated freeze and thaw cycles.

Application Note

Predicted MW: 53kd, Western blotting: 1:500~1:1000, Immunofluorescence: 1:100~1:200

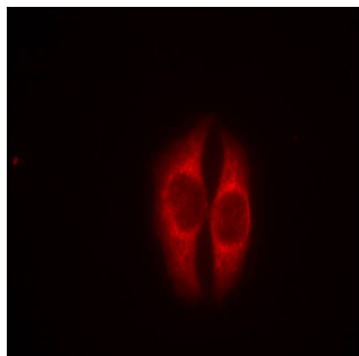


Figure 1: Immunofluorescence staining of methanol-fixed HeLa cells using p53(Phospho-Ser37) Antibody 35-1095 .

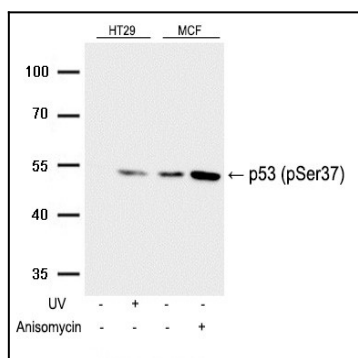


Figure 2: Western blot analysis of extracts from HT29 cells untreated or treated with UV, and MCF cells untreated or treated with Anisomycin using p53 (Phospho-Ser37) Antibody 35-1095 .