

p53(Phospho-Ser37) Antibody

Catalog No: #11098

Package Size: #11098-1 50ul #11098-2 100ul

Description

Product Name	p53(Phospho-Ser37) Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Antibodies were produced by immunizing rabbits with synthetic phosphopeptide and KLH conjugates. Antibodies were purified by affinity-chromatography using epitope-specific phosphopeptide. Non-phospho specific antibodies were removed by chromatography using non-phosphopeptide.
Applications	WB IF
Species Reactivity	Hu
Specificity	The antibody detects endogenous level of p53 only when phosphorylated at serine 37.
Immunogen Type	Peptide-KLH
Immunogen Description	Peptide sequence around phosphorylation site of serine 37 (L-P-S(p)-Q-A) derived from Human p53.
Conjugates	Unconjugated
Target Name	p53
Modification	Phospho
Other Names	Tumor suppressor p53; Phosphoprotein p53; Antigen NY-CO-13; TP53;
Accession No.	Swiss-Prot: P04637NCBI Protein: NP_000537.3
Concentration	1.0mg/ml
Formulation	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	Store at -20°C for long term preservation (recommended). Store at 4°C for short term use.

Application Details

Predicted MW: 53kd

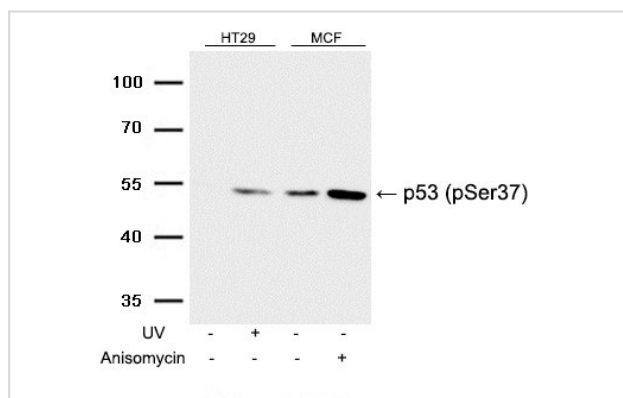
Western blotting: 1:500~1:1000

Immunofluorescence: 1:100~1:200

Images



Immunofluorescence staining of methanol-fixed HeLa cells using p53(Phospho-Ser37) Antibody #11098.



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 #11098.

Background

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.

Published Papers

el at., Cell cycle arrest and apoptosis of OVCAR-3 and MCF-7 cells induced by co-immobilized TNF- δ O plus IFN- η 1 $\rightarrow$ on polystyrene and the role of p53 activation. In Biomaterials

on 2012 Sep by Yan-Qing Guan, Zhibin Li, et al..PMID: 22682938, , (2012)

[PMID:22682938](#)

el at., Interplay between the Notch and PI3K/Akt pathways in high glucose-induced podocyte apoptosis. In Am J Physiol Renal Physiol on 2014 Jan by Xiao-Mei Wang, Min Yao,et al..PMID:24226527, , (2014)

[PMID:24226527](#)

Note: This product is for in vitro research use only and is not intended for use in humans or animals.