Data Sheet (Cat.No.TMAC-02998)

Anti-Phospho-p53 (Ser37) Polyclonal Antibody

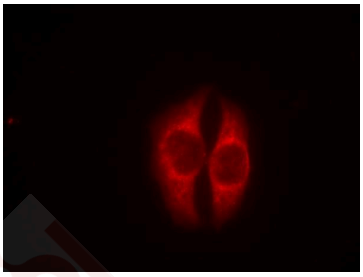
Product Details

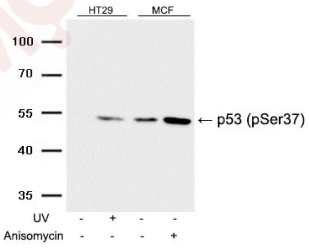
Ig Type:	IgG
Reactivity:	Human,Mouse,Rat
Conjugation:	Unconjugated
Purification:	Antibodies were produced by immunizing rabbits with synthetic phosphopeptide and KLH conjugates. Antibodies were purified by affinity-chromatography using epitope-specific phosphopeptide. Non-phospho specific antibodies were removed by chromatogramphy using non-phosphopeptide.

Applications

Verified Activity:

1. Immunofluorescence staining of methanol-fixed Hela cells using p53 (Phospho-Ser37) Antibody TMAC-02998.
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 TMAC-02998.





Application: ELISA,IF,IHC,WB

Properties

Stability & Storage:	Store at 2°C-8°C for 1 month. Store at -20°C or -80°C for 12 months. Avoid repeated freeze-thaw cycles.
Shipping:	Shipping with blue ice.

Antigen Details

Immunogen:	Peptide sequence around phosphorylation site of serine 37 (L-P-S(p)-Q-A) derived from Human p53
Antigen Species:	human
Uniprot ID:	P04637
Synonyms:	p-p53 (S37);p53 (p-S37);p-p53 (Ser37);p53 (p-Ser37)

Research 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