

#21085

## p53 (Ab-15) Antibody

**Catalog:** #21085-1 50µl **Orders:** [order@signalwayantibody.com](mailto:order@signalwayantibody.com)  
#21085-2 100µl **Support:** [tech@signalwayantibody.com](mailto:tech@signalwayantibody.com)  
**Storage:** Store at -20°C/1 year **Web:** [www.signalwayantibody.com](http://www.signalwayantibody.com)



Application	Species Reactivity	Source	Molecular Wt.
WB IHC IF	Human Mouse Rat	Rabbit Polyclonal Ab	53KD

**Description:** Antibodies were produced by immunizing rabbits with synthetic peptide and KLH conjugates. Antibodies were purified by affinity-chromatography using epitope-specific peptide.

**Specificity:** The antibody detects endogenous level of total p53 protein.

**Immunogen:** Peptide sequence around aa.13~17 (P-L-S-Q-E) derived from Human p53.

**Formulation:** Supplied at 1.0mg/mL in phosphate buffered saline (without Mg<sup>2+</sup> and Ca<sup>2+</sup>), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.

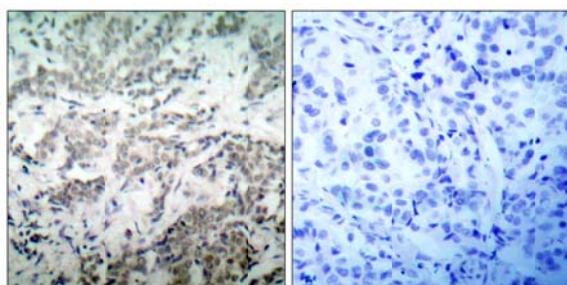
**Synonyms:** Tumor suppressor p53 Phosphoprotein p53  
Antigen NY-CO-13 TP53

**Accession No.:** Swiss-Prot#: P04637 NCBI Gene#: 7157  
NCBI Protein#: NP\_000537.3

**Background:** p53 is a nuclear protein which plays an essential role in the regulation of cell cycle specifically in the transition from G<sub>0</sub> to G<sub>1</sub>. 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

### References:

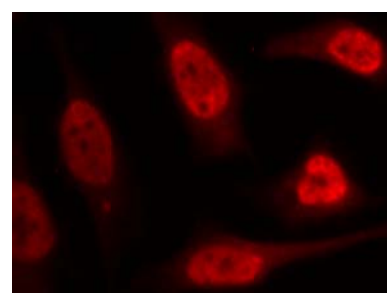
Lin T, et al. (2005) Nat Cell Biol; 7(2): 165-71.  
Vega FM, et al. (2004) Mol Cell Biol; 24(23): 10366-80.  
Li J, et al. (2004) J Biol Chem; 279(40): 41275-9.  
Wang J, et al. (2004) J Biol Chem; 279(38): 39584-92.



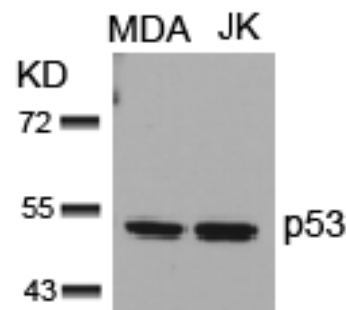
Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using p53 (Ab-15) Antibody #21085 (left) or the same antibody preincubated with blocking peptide (right).

### Recommended Dilutions:

Western blotting 1:500~1:1000  
Immunohistochemistry 1:50~1:100  
Immunofluorescence 1:100~1:200



Immunofluorescence staining of methanol-fixed Hela cells using p53 (Ab-15) Antibody #21085.



Western blot analysis of extracts from MDA and JK cells using p53 (Ab-15) Antibody #21085.

**Citation:** If you publish research using #21085 please [let us know](#).

**Related Pathway:** Akt, Cancer/Apoptosis, CellCycle, MAPK, Chromatin/Transcription

**Note:** For western blotting, incubate membrane with diluted antibody in 5% nonfat milk, 1X TBS, 0.1% Tween-20 at 4°C with gentle shaking, overnight.

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