

**p53 Antibody (S15)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP6266E**

**Specification**

**p53 Antibody (S15) - Product Information**

Application	<b>IF, WB,E</b>
Primary Accession	<a href="#">P04637</a>
Reactivity	<b>Human</b>
Host	<b>Rabbit</b>
Clonality	<b>Polyclonal</b>
Isotype	<b>Rabbit Ig</b>
Calculated MW	<b>43653</b>
Antigen Region	<b>1-30</b>

**p53 Antibody (S15) - Additional Information**

**Gene ID 7157**

**Other Names**

Cellular tumor antigen p53, Antigen NY-CO-13, Phosphoprotein p53, Tumor suppressor p53, TP53, P53

**Target/Specificity**

This p53 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from human p53.

**Dilution**

IF~~1:10~50  
WB~~1:2000

**Format**

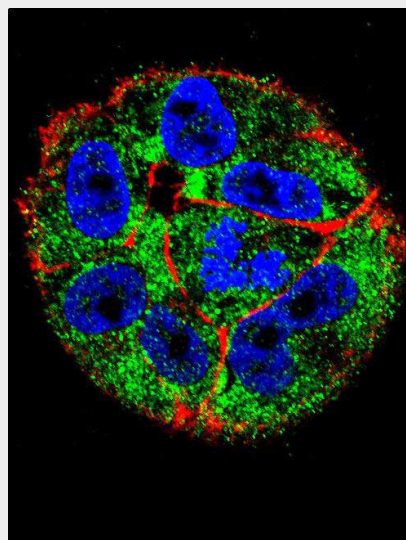
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**Storage**

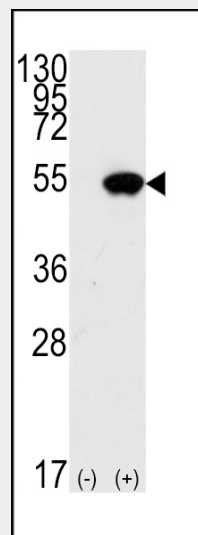
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

p53 Antibody (S15) is for research use only and not for use in diagnostic or therapeutic procedures.



Confocal immunofluorescent analysis of p53 Antibody (S15)(Cat#AP6266e) with A2058 cell followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG (green). Actin filaments have been labeled with Alexa Fluor 555 phalloidin (red).DAPI was used to stain the cell nuclear (blue).



Western blot analysis of TP53(arrow) using rabbit polyclonal p53 Antibody (S15) (Cat.#AP6266e). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently

**p53 Antibody (S15) - Protein Information**

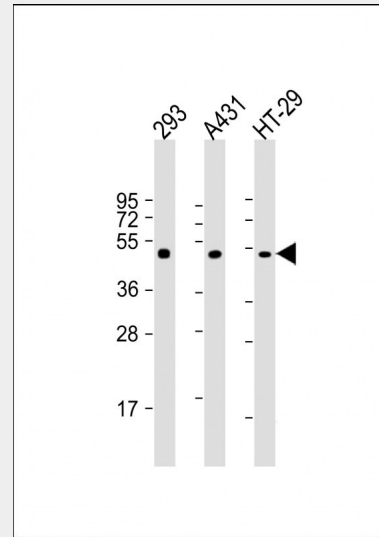
**Name** TP53

**Synonyms** P53

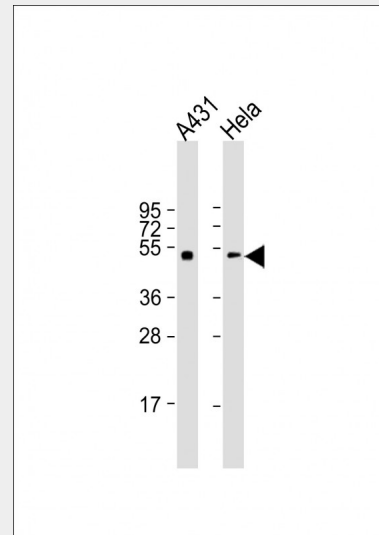
**Function**

Acts as a tumor suppressor in many tumor types; induces growth arrest or apoptosis depending on the physiological circumstances and cell type. Involved in cell cycle regulation as a trans-activator that acts to negatively regulate cell division by controlling a set of genes required for this process. One of the activated genes is an inhibitor of cyclin-dependent kinases. Apoptosis induction seems to be mediated either by stimulation of BAX and FAS antigen expression, or by repression of Bcl-2 expression. Its pro-apoptotic activity is activated via its interaction with PPP1R13B/ASPP1 or TP53BP2/ASPP2 (PubMed:<a href="http://www.uniprot.org/citations/12524540" target="\_blank">12524540</a>). However, this activity is inhibited when the interaction with PPP1R13B/ASPP1 or TP53BP2/ASPP2 is displaced by PPP1R13L/iASPP (PubMed:<a href="http://www.uniprot.org/citations/12524540" target="\_blank">12524540</a>). In cooperation with mitochondrial PPIF is involved in activating oxidative stress-induced necrosis; the function is largely independent of transcription. Induces the transcription of long intergenic non-coding RNA p21 (lincRNA-p21) and lincRNA-Mkln1. LincRNA-p21 participates in TP53-dependent transcriptional repression leading to apoptosis and seems to have an effect on cell-cycle regulation. Implicated in Notch signaling cross- over. Prevents CDK7 kinase activity when associated to CAK complex in response to DNA damage, thus stopping cell cycle progression. Isoform 2 enhances the transactivation activity of isoform 1 from some but not all TP53-inducible promoters. Isoform 4 suppresses transactivation activity and impairs growth suppression mediated by isoform 1. Isoform 7 inhibits isoform 1-mediated apoptosis. Regulates the circadian clock by repressing CLOCK-ARNTL/BMAL1-mediated transcriptional activation of PER2 (PubMed:<a href="http://www.uniprot.org/c

transfected with the TP53 gene (Lane 2) (Origene Technologies).



All lanes : Anti-p53 Antibody (S15) at 1:2000 dilution Lane 1: 293 whole cell lysate Lane 2: A431 whole cell lysate Lane 3: HT-29 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 44 kDa Blocking/Dilution buffer: 5% NFDm/TBST.



All lanes : Anti-p53 Antibody (S15) at 1:2000 dilution Lane 1: A431 whole cell lysate Lane 2: HeLa whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 44 kDa Blocking/Dilution buffer: 5% NFDm/TBST.

**p53 Antibody (S15) - Background**

itations/24051492"  
target="\_blank">24051492</a>).

#### Cellular Location

Cytoplasm. Nucleus. Nucleus, PML body  
Endoplasmic reticulum. Mitochondrion  
matrix Cytoplasm, cytoskeleton,  
microtubule organizing center, centrosome.  
Note=Recruited into PML bodies together  
with CHEK2 (PubMed:12810724).  
Translocates to mitochondria upon  
oxidative stress (PubMed:22726440).  
Translocates to mitochondria in response to  
mitomycin C treatment (PubMed:27323408)  
[Isoform 2]: Nucleus. Cytoplasm.  
Note=Localized mainly in the nucleus with  
minor staining in the cytoplasm [Isoform 4]:  
Nucleus. Cytoplasm. Note=Predominantly  
nuclear but translocates to the cytoplasm  
following cell stress [Isoform 8]: Nucleus.  
Cytoplasm. Note=Localized in both nucleus  
and cytoplasm in most cells. In some cells,  
forms foci in the nucleus that are different  
from nucleoli

#### Tissue Location

Ubiquitous. Isoforms are expressed in a  
wide range of normal tissues but in a  
tissue-dependent manner. Isoform 2 is  
expressed in most normal tissues but is not  
detected in brain, lung, prostate, muscle,  
fetal brain, spinal cord and fetal liver.  
Isoform 3 is expressed in most normal  
tissues but is not detected in lung, spleen,  
testis, fetal brain, spinal cord and fetal liver.  
Isoform 7 is expressed in most normal  
tissues but is not detected in prostate,  
uterus, skeletal muscle and breast. Isoform  
8 is detected only in colon, bone marrow,  
testis, fetal brain and intestine. Isoform 9 is  
expressed in most normal tissues but is not  
detected in brain, heart, lung, fetal liver,  
salivary gland, breast or intestine

Tumor protein p53, a nuclear protein, 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,  
it is expressed in high amounts, and believed  
to contribute to transformation and  
malignancy. p53 is a DNA-binding protein  
containing DNA-binding, oligomerization and  
transcription activation domains. It is  
postulated to bind as a tetramer to a  
p53-binding site and activate expression of  
downstream genes that inhibit growth and/or  
invasion, and thus function as a tumor  
suppressor. Mutants of p53 that frequently  
occur in a number of different human cancers  
fail to bind the consensus DNA binding site,  
and hence cause the loss of tumor suppressor  
activity. Alterations of the TP53 gene occur not  
only as somatic mutations in human  
malignancies, but also as germline mutations  
in some cancer-prone families with Li-Fraumeni  
syndrome.

#### p53 Antibody (S15) - References

- Blanchette, P., et al., Mol. Cell. Biol.  
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279(41):42545-42551 (2004).  
Anazawa, Y., et al., Oncogene  
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Montagnoli, A., et al., Cancer Res.  
64(19):7110-7116 (2004).

#### p53 Antibody (S15) - Protocols

Provided below are standard protocols that you  
may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)

- [Flow Cytometry](#)
- [Cell Culture](#)