

# Phospho-p53(S315) Antibody

Affinity Purified Rabbit Polyclonal Antibody (Pab)  
Catalog # AP3200a

## Product Information

---

<b>Application</b>	WB, DB, IHC-P, E
<b>Primary Accession</b>	<a href="#">P04637</a>
<b>Other Accession</b>	<a href="#">P56423</a>
<b>Reactivity</b>	Human
<b>Predicted</b>	Monkey
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	Rabbit IgG
<b>Clone Names</b>	RB7777

## Additional Information

---

<b>Other Names</b>	Cellular tumor antigen p53, Antigen NY-CO-13, Phosphoprotein p53, Tumor suppressor p53, TP53, P53
<b>Target/Specificity</b>	This p53 Antibody is generated from rabbits immunized with a KLH conjugated synthetic phosphopeptide corresponding to amino acid residues surrounding S315 of human p53.
<b>Dilution</b>	WB~~1:1000 DB~~1:500 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
<b>Format</b>	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. This antibody is purified through a protein A column, followed by peptide affinity purification.
<b>Storage</b>	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.
<b>Precautions</b>	Phospho-p53(S315) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

---

### Background

---

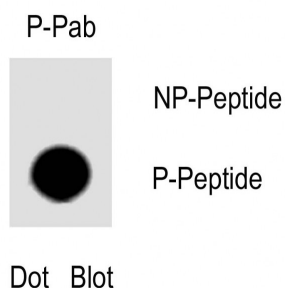
Tumor protein p53, a nuclear protein, plays an essential role in the regulation of cell cycle, specifically in the transition from G0 to G1. It is found in very low levels in normal cells, however, in a variety of transformed cell lines, it is expressed in high amounts, and believed to contribute to 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.

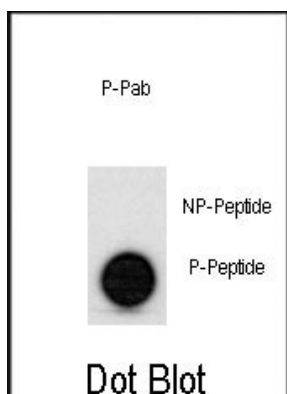
## References

- Garden, G.A., et al., *Biochem. Biophys. Res. Commun.* 331(3):799-809 (2005).  
 Castedo, M., et al., *Biochem. Biophys. Res. Commun.* 331(3):701-706 (2005).  
 Duensing, A., et al., *Biochem. Biophys. Res. Commun.* 331(3):694-700 (2005).  
 Seemann, S., et al., *Oncogene* 24(24):3853-3863 (2005).  
 Mann, K., et al., *Oncogene* 24(24):3964-3975 (2005).

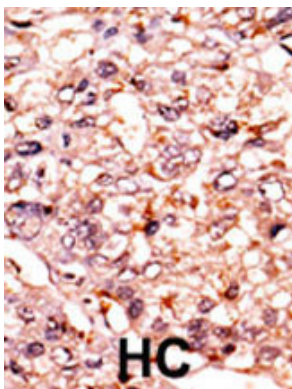
## Images



Dot blot analysis of Phospho-Phospho-p53(S315) Antibody Phospho-specific Pab (Cat. AP3200a) on nitrocellulose membrane. 50ng of Phospho-peptide or Non Phospho-peptide per dot were adsorbed. Antibodies working concentration was 0.5ug per ml.



Dot blot analysis of anti-hp53-S315 Phospho-specific Pab (Cat. #AP3200a) on nitrocellulose membrane. 50ng of Phospho-peptide or Non Phospho-peptide per dot were adsorbed. Antibody working concentrations are 0.5ug per ml.



Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by AEC staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.