

## Basic Information

<b>Product Name</b>	Anti-P53/TP53 Antibody	
<b>Gene Name</b>	TP53	
<b>Source</b>	Rabbit	
<b>Clonality</b>	Polyclonal	
<b>Isotype</b>	IgG	
<b>Species Reactivity</b>	human	
<b>Tested Application</b>	WB, IHC, ICC/IF, FCM	
<b>Contents</b>	500 ug/ml antibody with PBS, 0.02% NaN <sub>3</sub> , 1 mg/ml BSA and 50% glycerol.	
<b>Immunogen</b>	E.coli-derived human P53 recombinant protein (Position: A74-D393). Human P53 shares 83% and 85% amino acid (aa) sequences identity with mouse and rat P53, respectively.	
<b>Concentration</b>	500 ug/ml	
<b>Purification</b>	Immunogen affinity purified.	
<b>Observed MW</b>	53 kDa	
<b>Dilution Ratios</b>	Western blot (WB): 1:500-2000 Immunohistochemistry (IHC): 1:50-400 Immunocytochemistry/Immunofluorescence (ICC/IF): 1:50-400 Flow Cytometry (Fixed): 1:50-200 (Boiling the paraffin sections in 10mM citrate buffer, pH6.0, or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

## Storage

12 months from date of receipt, -20°C as supplied. 6 months 2 to 8°C after reconstitution. Avoid repeated freezing and thawing.

## Background Information

The p53 tumor antigen is found in increased amounts in a wide variety of transformed cells. The protein is also detectable in many actively proliferating, nontransformed cells, but it is undetectable or present at low levels in resting cells. This protein induces cell cycle arrest or apoptosis in response to sublethal or severe DNA damage, respectively, by differential transcription of target genes and through transcription-independent apoptotic functions. The p53 protein contains 393 amino acids. Human p53 tumour antigen is located to band 17p13. p53 mutations are common in pancreatic cancer and are absent in chronic pancreatitis.

## Reference

Anti-P53/TP53 Antibody被引用在53文献中。

## Selected Validation Data

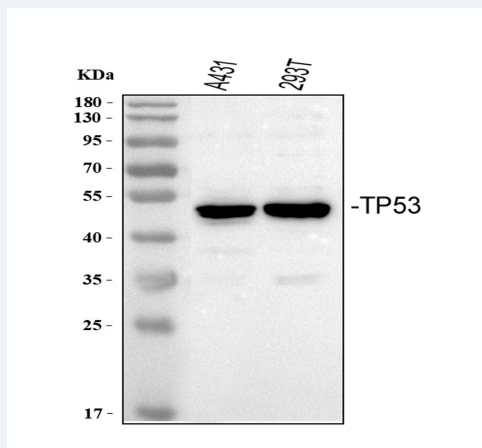


Figure 1. Western blot analysis of P53/TP53 using anti-P53/TP53 antibody (PB9008). The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: human A431 whole cell lysates, Lane 2: human 293T whole cell lysates. After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-P53/TP53 antigen affinity purified polyclonal antibody (PB9008) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for P53/TP53 at approximately 53 kDa. The expected band size for P53/TP53 is at 44 kDa.

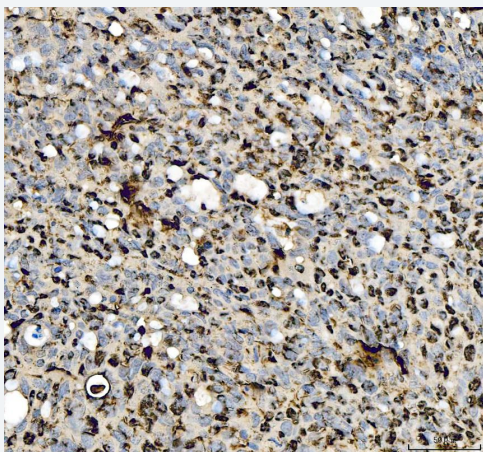


Figure 2. IHC analysis of P53/TP53 using anti-P53/TP53 antibody (PB9008). P53/TP53 was detected in a paraffin-embedded section of human ovarian cancer tissue. The tissue section was incubated with rabbit anti-P53/TP53 Antibody (PB9008) at a dilution of 1:200 and developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB (Catalog # AR1022) as the chromogen.

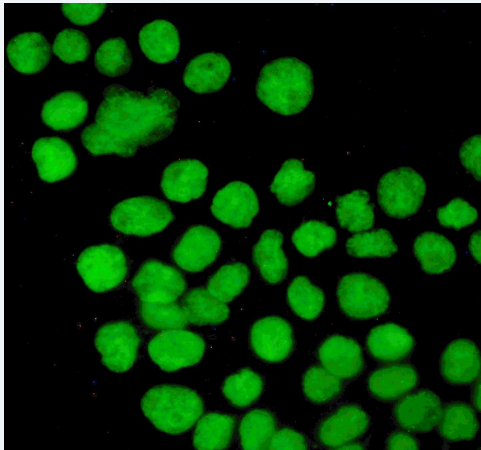


Figure 3. IF analysis of P53/TP53 using anti-P53/TP53 antibody (PB9008).

P53/TP53 was detected in an immunocytochemical section of A431 cells. The section was incubated with rabbit anti-P53/TP53 Antibody (PB9008) at a dilution of 1:100. DyLight®488 Conjugated Goat Anti-Rabbit IgG (Green) (Catalog # BA1127) was used as secondary antibody.

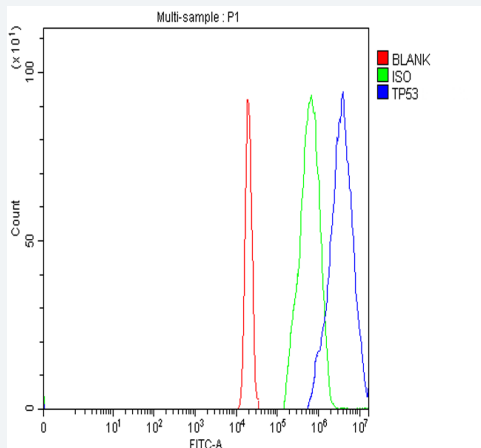


Figure 4. Flow Cytometry analysis of A431 cells using anti-P53/TP53 antibody (PB9008).

Overlay histogram showing A431 cells stained with PB9008 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-P53/TP53 Antibody (PB9008) at 1:100 dilution for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.