## For Research Use Only

# P53 Polyclonal antibody

Catalog Number: 10442-1-AP

**Featured Product** 

1158 Publications



**Basic Information** 

Catalog Number: 10442-1-AP

Source: Rabbit

Isotype: IgG

Immunogen Catalog Number:

AG0698

GenBank Accession Number:

BC003596 GeneID (NCBI):

UNIPROT ID: P04637

7157

Full Name: tumor protein p53

Calculated MW: 44 kDa

Observed MW: 53 kDa **Purification Method:** 

Antigen affinity purification

Recommended Dilutions: WB: 1:5000-1:50000

IP: 0.5-4.0 ug for 1.0-3.0 mg of total

protein lysate IHC: 1:250-1:1000 IF/ICC: 1:200-1:800

**Applications** 

**Tested Applications:** 

WB, IHC, IF/ICC, IP, ELISA

Cited Applications:

WB, IHC, IF, IP, CoIP, ChIP, RIP

Species Specificity:

human, rat

Cited Species:

human, rat, pig, rabbit, monkey, chicken, zebrafish,

sheep, goat

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate

buffer pH 6.0

Positive Controls:

WB: A431 cells, SMMC-7721 cells, MCF-7 cells, rat colon tissue, HEK-293 cells, HT-29 cells, HepG2 cells

IP: HEK-293 cells,

IHC: human ovary cancer tissue,

IF/ICC: A431 cells,

# **Background Information**

TP53, also known as P53 and NY-CO-13, belongs to the p53 family and has 9 isoforms. In SDS-Page, the observed molecular weight is about 53 kDa. TP53 acts as a tumor suppressor in many tumor types, including growth arrest or apoptosis depending on the physiological circumstances and cell types. It is 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. TP53 Localizes in the nucleus in most cells but found in the cytoplasm in some cells. (PMID: 26166714; PMID: 25225161)

#### **Notable Publications**

Author	Pubmed ID	Journal	Application
Sushan Yang	36180831	Cell Mol Biol Lett	WB
Xiaoyan Liu	31574948	Int J Mol Sci	WB
Shanshan Hu	33134183	Front Oncol	WB

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

Storage Buffer

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

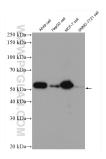
For technical support and original validation data for this product please contact:

T: 4006900926 E: Proteintech-CN@ptglab.com

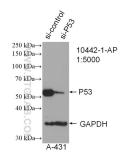
W: ptgcn.co

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

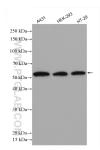
## **Selected Validation Data**



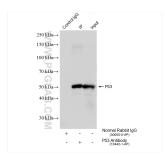
Various lysates were subjected to SDS PAGE followed by western blot with 10442-1-AP (P53 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



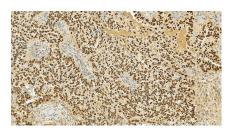
WB result of P53 antibody (10442-1-AP; 1:5000; incubated at room temperature for 1.5 hours) with sh-Control and sh-P53 transfected A431 cells.



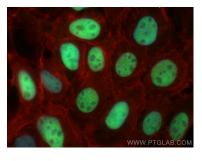
Various lysates were subjected to SDS PAGE followed by western blot with 10442-1-AP (P53 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



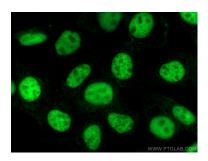
IP result of anti-P53 (IP:10442-1-AP, 4ug; Detection:10442-1-AP 1:20000) with HEK-293 cells lysate 1560 ug.



Immunohistochemical analysis of paraffinembedded human ovary cancer tissue slide using 10442-1-AP (P53 antibody) at dilution of 1:500 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed A431 cells using P53 antibody (10442-1-AP) at dilution of 1:400 and CoraLite® 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), CL594-Phalloidin (red).



Immunofluorescent analysis of (4% PFA) fixed A431 cells using P53 antibody (10442-1-AP) at dilution of 1:400 and CoraLite® 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).