For Research Use Only

P53 Polyclonal antibody

Catalog Number:21891-1-AP Featured Product 38 Publications

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Basic Information

Catalog Number:
21891-1-AP

Size:
150ul , Concentration: 600 μg/ml by Nanodrop;

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG16596

GenBank Accession Number:
BC003596

GeneID (NCBI):
7157

Full Name:
tumor protein p53

Calculated MW:
393 aa, 44 kDa

Observed MW:
53 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
WB 1:500-1:2000
IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate
IHC 1:50-1:500
IF 1:20-1:200

Applications

Tested Applications:
IF, IHC, IP, WB, ELISA

Cited Applications:
CoIP, IF, IHC, IP, WB

Species Specificity:
human, rat

Cited Species:
human, rat, mouse

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, HEK-293 cells

IP : A431 cells,

IHC : human prostate cancer tissue, human gliomas tissue, human endometrial cancer tissue, human ovary tumor tissue

IF : HepG2 cells,

Background Information

TP53, also named as P53 and NY-CO-13, belongs to the p53 family that functions as a central mediator for organizing cellresponses to various stress and anticancer drugswith apoptosis,G1- phase arrest, and DNA repair. [PMID: 20346922]. In addition, TP53 appears to induce apoptosis through nontranscriptional cytoplasmic processes. In unstressed cells, TP53 is kept inactive essentially through the actions of the ubiquitin ligase MDM2, which inhibits TP53 transcriptional activity and ubiquitinates TP53 to promote its degradation[PMID: 22330136]. TP53 acts as a tumor suppressor in many tumor types and induces growth arrest or apoptosis depending on the physiological circumstances and cell type. 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
Xuxiu Tao	36156329	Cancer Sci	WB,IHC
Yuan Yin	34562520	Cancer Lett	WB,IHC,CoIP
Kazuki Morita	36196449	Regen Ther	WB

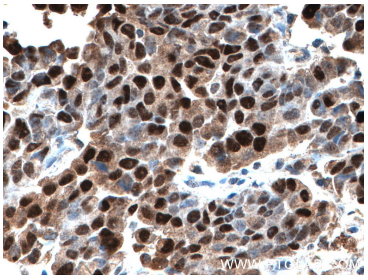
Storage

Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

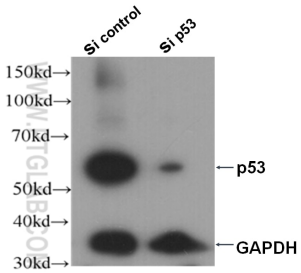
*** 20ul sizes contain 0.1% BSA

For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

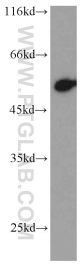
Selected Validation Data



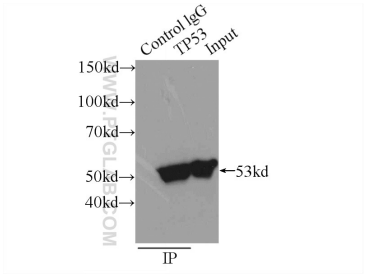
Immunohistochemical analysis of paraffin-embedded human prostate cancer tissue slide using 21891-1-AP (TP53 antibody) at dilution of 1:200 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



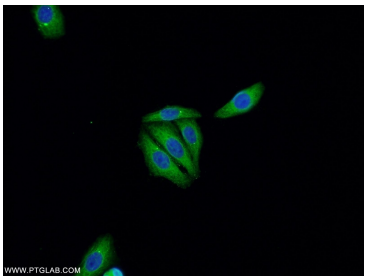
WB result of p53 antibody (21891-1-AP, 1:1000) with sh-control and sh-p53 transfected A431 cells.



A431 cells were subjected to SDS PAGE followed by western blot with 21891-1-AP (TP53 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.

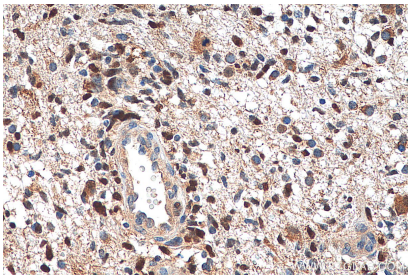


IP Result of anti-TP53 (IP:21891-1-AP, 3ug; Detection:21891-1-AP 1:1000) with A431 cells lysate 1650ug.

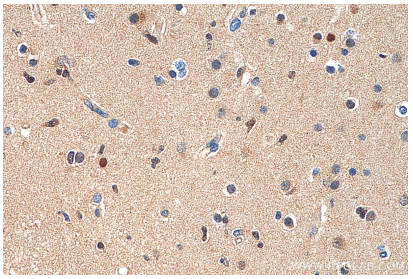


Immunofluorescent analysis of HepG2 cells using 21891-1-AP (TP53 antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).

Immunohistochemical analysis of paraffin-embedded human gliomas tissue slide using 21891-1-AP (P53 antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human gliomas tissue slide using 21891-1-AP (P53 antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human gliomas tissue slide using 21891-1-AP (P53 antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).