

For Research Use Only

Phospho-P53 (Ser46) Monoclonal antibody



Catalog Number: 67900-1-Ig

Basic Information

Catalog Number: 67900-1-Ig	GenBank Accession Number: BC003596	Purification Method: Protein G purification
Size: 100ul , Concentration: 1000 µg/ml by Nanodrop;	GeneID (NCBI): 7157	CloneNo.: 1D10A12
Source: Mouse	Full Name: tumor protein p53	Recommended Dilutions: WB 1:5000-1:50000 IHC 1:500-1:2000 IF 1:200-1:800
Isotype: IgG1	Calculated MW: 44 kDa	
	Observed MW: 53 kDa	

Applications

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

Species Specificity:
Human

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 : HT-29 cells, Calyculin A treated HT-29 cells, etoposide treated HT-29 cells, UV treated A431 cells, Calyculin A treated HEK-293 cells

IHC : human colon cancer tissue,

IF : etoposide treated HT-29 cells,

Background Information

P53 is a 53 kDa protein that is activated in response to alteration of normal cell homeostasis, including DNA damage, nutrient starvation, heat shock, virus infection, pH change, hypoxia, and oncogene activation. P53 maintains genetic stability by regulating different processes, such as cell-cycle arrest, DNA synthesis and repair, programmed cell death, and energy metabolism. In non-stressed conditions these proteins bind p53, ubiquitylate it and target it for degradation by the proteasome. In stressed conditions the function of the Mdm2-Mdm4 complex is blocked by phosphorylation, protein-binding events and/or enhanced degradation. (PMID: 19935675, PMID: 24379683)

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

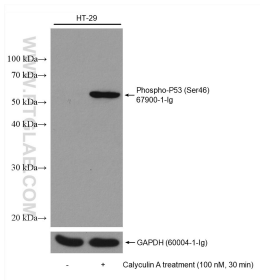
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

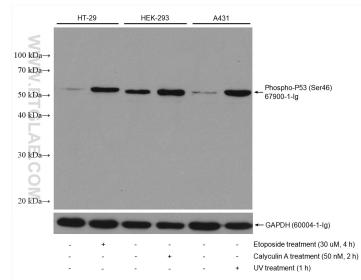
E: proteintech@ptglab.com
W: ptglab.com

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

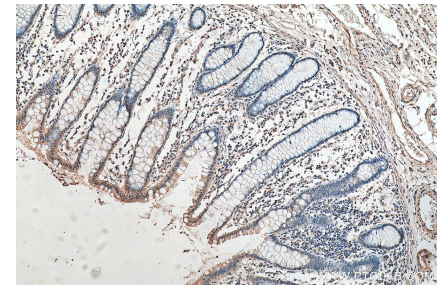
Selected Validation Data



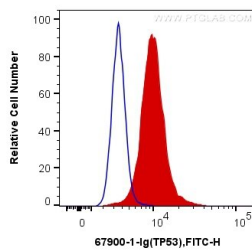
Non-treated and Calyculin A treated HT-29 cells were subjected to SDS PAGE followed by western blot with 67900-1-Ig (Phospho-P53 (Ser46) antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. The membrane was stripped and re-blotted with GAPDH antibody as loading control.



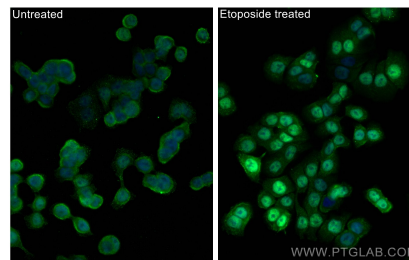
Various lysates were subjected to SDS PAGE followed by western blot with 67900-1-Ig (Phospho-P53 (Ser46) antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. The membrane was stripped and re-blotted with GAPDH antibody as loading control.



Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 67900-1-Ig (Phospho-P53 (Ser46) antibody) at dilution of 1:1000 (under 10x Lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



1X10⁶ HEK-293 cells were intracellularly stained with 0.25 ug Anti-Human Phospho-P53 (Ser46) (67900-1-Ig, Clone:1D10A12) and CoraLite@488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) at dilution 1:1000 (red), or 0.25 ug Control Antibody. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



Immunofluorescent analysis of (4% PFA) fixed etoposide treated HT-29 cells using Phospho-P53 (Ser46) antibody (67900-1-Ig, Clone: 1D10A12) at dilution of 1:400 and CoraLite@488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).