## For Research Use Only

## Phospho-P53 (Ser46) Monoclonal antibody, PBS Only (Detector) Catalog Number:67900-1-PBS



Basic Information	Catalog Number: 67900-1-PBS	GenBank Accession Number: BC003596	Purification Method: Protein G purification
	Size:	GenelD (NCBI):	CloneNo.:
	100ug , Concentration: 1mg/ml by	7157	1D10A12
	Nanodrop;	UNIPROT ID:	
	Source:	P04637	
	Mouse	Full Name:	
	Isotype:	tumor protein p53	
	IgU1	Calculated MW: 44 kDa	
		Observed MW: 53 kDa	
Applications	Tested Applications: WB, IHC, IF/ICC, FC (Intra), Cytometric bead array, Indirect ELISA		
	Species Specificity: human		
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Product Information	67900-1-PBS targets Phospho-P53 (Ser46) as part of a matched antibody pair:		
	MP50183-1: 67826-1-PBS capture and 67900-1-PBS detection (validated in Cytometric bead array)		
	MP50184-1: 60283-2-PBS capture and 67900-1-PBS detection (validated in Cytometric bead array)		
	Unconjugated mouse monoclonal antibody pair in PBS only (BSA and azide free) storage buffer at a concentration of 1 mg/mL, ready for conjugation.		
	This conjugation ready format makes antibodies ideal for use in many applications including: ELISAs, multiplex assays requiring matched pairs, mass cytometry, and multiplex imaging applications.Antibody use should be optimized by the end user for each application and assay.		
Background Information	P53 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 -80°C. Storage Buffer: PBS Only		

For technical support and original validation data for this product please contact: T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free E: proteintech@ptglab.com in USA), or 1(312) 455-8498 (outside USA) 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 67900-1-1g (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. This data was developed using the same antibody clone with 67900-1-PBS in a different storage buffer formulation.



Various lysates were subjected to SDS PAGE followed by western blot with 67900-1-1g (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. This data was developed using the same antibody clone with 67900-1-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (4% PFA) fixed etoposide treated HT-29 cells using Phospho-P53 (Ser46) antibody (67900-1-1g, Clone: 1D10A12) at dilution of 1:400 and CoraLite@488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L). This data was developed using the same antibody clone with 67900-1-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffinembedded human colon cancer tissue slide using 67900-1-1g (Phospho-P53 (Ser46) antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 67900-1-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffinembedded human colon cancer tissue slide using 67900-1-1g (Phospho-P53 (Ser46) antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 67900-1-PBS in a different storage buffer formulation.



1X10<sup>^6</sup> HT-29 cells were intracellularly stained with 0.4 ug Anti-Human Phospho-P53 (Ser46) (67900-1-lg, Clone:1D10A12) and Coralite® 488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Mouse IgG1 Isotype Control (MOPC-21) (65124-1-lg, Clone: MOPC-21) (blue). Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011). This data was developed using the same antibody clone with 67900-1-PBS





Cytometric bead array in cell lysate using MP50183-1, Phospho-P53 (Ser156746) Monoclonal Matched Antibody Pair, PBS Only. Capture antibody: 67826-1-PBS. Detection antibody: 67900-1-PBS. Cell lysate: Non-treated HT-29 and Calyculin A treated HT-29 (30µg/well). Non-related target CEACAM1 Monoclonal Matched Antibody Pair (MP50132-1) was served as control. Cytometric bead array in cell lysate using MP50184-1, Phospho-P53 (Ser46) Monoclonal Matched Antibody Pair, PBS Only. Capture antibody: 60283-2-PBS. Detection antibody: 67900-1-PBS. Cell lysate: Non-treated HT-29 and Calyculin A treated HT-29 (30µg/well). Non-related target CEACAM1 Monoclonal Matched Antibody Pair (MP50132-1) was served as control.