

For Research Use Only



# CoraLite® Plus 488-conjugated Phospho-P53 (Ser46) Monoclonal antibody

Catalog Number: **CL488-67900**

## Basic Information

<b>Catalog Number:</b> CL488-67900	<b>GenBank Accession Number:</b> BC003596	<b>Purification Method:</b> Protein G purification
<b>Size:</b> 100ul , Concentration: 1000 ug/ml by Nanodrop;	<b>GeneID (NCBI):</b> 7157	<b>CloneNo.:</b> 1D10A12
<b>Source:</b> Mouse	<b>UNIPROT ID:</b> P04637	<b>Recommended Dilutions:</b> IF/ICC 1:50-1:500
<b>Isotype:</b> IgG1	<b>Full Name:</b> tumor protein p53	<b>Excitation/Emission maxima wavelengths:</b> 493 nm / 522 nm
	<b>Calculated MW:</b> 44 kDa	
	<b>Observed MW:</b> 53 kDa	

## Applications

<b>Tested Applications:</b> IF/ICC, FC (Intra)	<b>Positive Controls:</b> IF/ICC : etoposide treated HT-29 cells,
<b>Species Specificity:</b> human	

## 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)

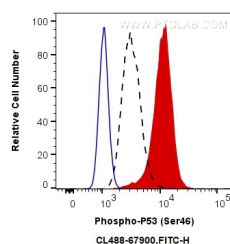
## Storage

**Storage:**  
Store at -20°C. Avoid exposure to light. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.  
Aliquoting is unnecessary for -20°C storage

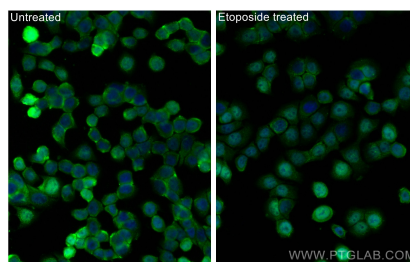
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
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## Selected Validation Data



1X10<sup>6</sup> HT-29 cells untreated (dashed lines) or treated with UV (red) were intracellularly stained with 0.25 ug CoraLite® Plus 488 Anti-Human Phospho-P53 (Ser46) (CL488-67900, Clone:1D10A12), or 0.25 ug Control Antibody (blue). Cells were fixed with 4% PFA and permeabilized with 90% MeOH.



Immunofluorescent analysis of (4% PFA) fixed etoposide treated HT-29 cells using CoraLite® Plus 488 Phospho-P53 (Ser46) antibody (CL488-67900, Clone: 1D10A12 ) at dilution of 1:200.