



# 53BP1 (phospho Ser25) Polyclonal Antibody

<b>Catalog No</b>	YP-Ab-00248
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Mouse;Rat
<b>Applications</b>	IHC;IF;ELISA
<b>Gene Name</b>	TP53BP1
<b>Protein Name</b>	Tumor suppressor p53-binding protein 1
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human 53BP1 around the phosphorylation site of Ser25. AA range:10-59
<b>Specificity</b>	Phospho-53BP1 (S25) Polyclonal Antibody detects endogenous levels of 53BP1 protein only when phosphorylated at S25.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source</b>	Polyclonal, Rabbit,IgG
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Dilution</b>	Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/10000. Not yet tested in other applications.
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	TP53BP1; Tumor suppressor p53-binding protein 1; 53BP1; p53-binding protein 1; p53BP1
<b>Observed Band</b>	
<b>Cell Pathway</b>	Nucleus . Chromosome . Chromosome, centromere, kinetochore . Localizes to the nucleus in absence of DNA damage (PubMed:28241136). Following DNA damage, recruited to sites of DNA damage, such as double strand breaks (DSBs); recognizes and binds histone H2A monoubiquitinated at 'Lys-15' (H2AK15Ub) and histone H4 dimethylated at 'Lys-20' (H4K20me2), two histone marks that are present at DSBs sites (PubMed:23333306, PubMed:23760478, PubMed:24703952, PubMed:28241136, PubMed:17190600). Associated with kinetochores during mitosis (By similarity). .
<b>Tissue Specificity</b>	Cerebellum,Cervix,Epithelium,Myeloid leukemia cell,Skeletal muscle,
<b>Function</b>	function:May have a role in checkpoint signaling during mitosis (By similarity). Enhances TP53-mediated transcriptional activation. Plays a role in the response to DNA damage.,PTM:Asymmetrically dimethylated on Arg residues by PRMT1. Methylation is required for DNA binding.,PTM:Phosphorylated at basal level in the absence of DNA damage. Hyper-phosphorylated in an ATM-dependent manner in response to DNA damage induced by ionizing radiation. Hyper-phosphorylated in an ATR-dependent manner in response to DNA damage induced by UV irradiation.,similarity:Contains 2 BRCT domains.,subcellular location:Associated



with kinetochores. Both nuclear and cytoplasmic in some cells. Recruited to sites of DNA damage, such as double strand breaks. Methylation of histone H4 at 'Lys-20' is required for efficient localization to double strand breaks.,subunit:Interacts with IFI202A (By similarity). Binds to th

**Background**

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**matters needing attention**

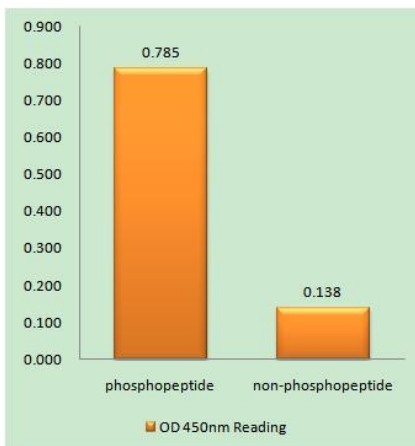
Avoid repeated freezing and thawing!

**Usage suggestions**

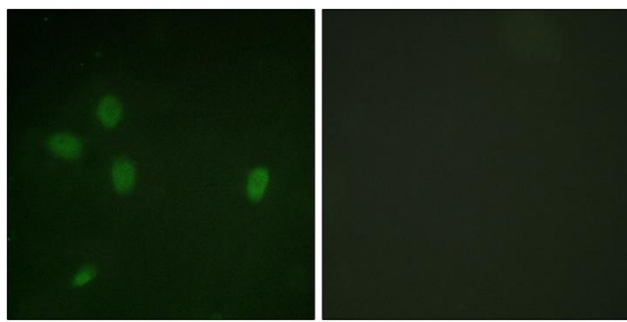
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



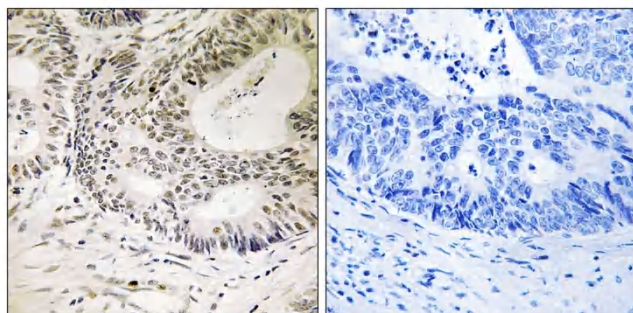
## Products Images



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using 53BP1 (Phospho-Ser25) Antibody



Immunofluorescence analysis of NIH/3T3 cells, using 53BP1 (Phospho-Ser25) Antibody. The picture on the right is blocked with the phospho peptide.



Immunohistochemistry analysis of paraffin-embedded human colon carcinoma, using 53BP1 (Phospho-Ser25) Antibody. The picture on the right is blocked with the phospho peptide.