

**53BP1 (phospho Ser25) Polyclonal Antibody**

<b>Catalog No :</b>	YP1140
<b>Reactivity :</b>	Human;Mouse;Rat
<b>Applications :</b>	IHC;IF;ELISA
<b>Target :</b>	53BP1
<b>Fields :</b>	>>NOD-like receptor signaling pathway
<b>Gene Name :</b>	TP53BP1
<b>Protein Name :</b>	Tumor suppressor p53-binding protein 1
<b>Human Gene Id :</b>	7158
<b>Human Swiss Prot No :</b>	Q12888
<b>Mouse Gene Id :</b>	27223
<b>Mouse Swiss Prot No :</b>	P70399
<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>Dilution :</b>	IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:10000. Not yet tested in other applications.
<b>Purification :</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.

**Concentration :** 1 mg/ml

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**Storage Stability :** -15°C to -25°C/1 year(Do not lower than -25°C)

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**Molecularweight :** 214kD

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**Background :** 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 the central domain of TP53/p53. May form homo-oligomers. Interacts with DCLRE1C. Interacts with histone H2AFX and this requires phosphorylation of H2AFX on 'Ser-139'. Interacts with histone H4 that has been dimethylated at 'Lys-20'. Has low affinity for histone H4 containing monomethylated 'Lys-20'. Does not bind histone H4 containing unmethylated or trimethylated 'Lys-20'. Has low affinity for histone H3 that has been dimethylated on 'Lys-79'. Has very low affinity for histone H3 that has been monomethylated on 'Lys-79' (in vitro). Does not bind unmethylated histone H3.,

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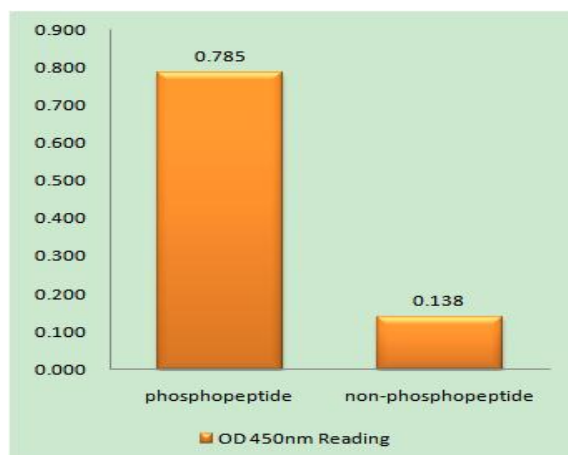
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**Subcellular Location :** Nucleus . Chromosome . Chromosome, centromere, kinetochore . Localizes to the nucleus in absence of DNA damage (PubMed:28241136). Following DNA damage, recruited to sites of DNA damage, such as double strand breaks (DSBs): 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). .

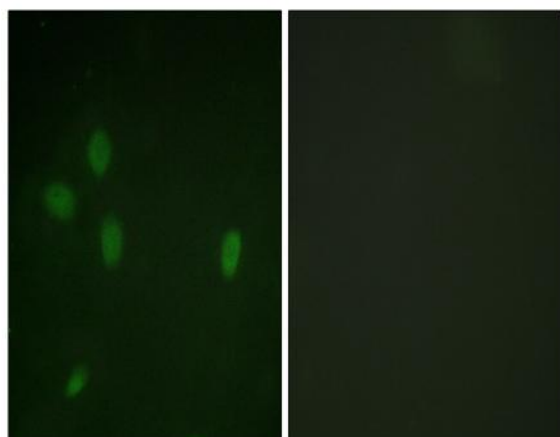
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<b>Expression :</b>	Cerebellum,Cervix,Epithelium,Myeloid leukemia cell,Skeletal muscle,
<b>Sort :</b>	1526
<b>No2 :</b>	2674S
<b>No4 :</b>	1
<b>Host :</b>	Rabbit
<b>Modifications :</b>	Phospho

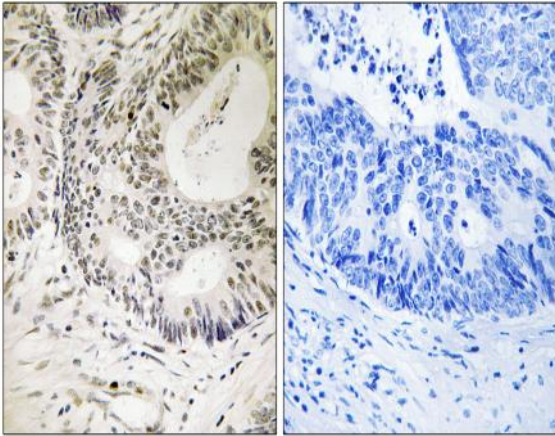
## Products Images



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.