



53BP1 rabbit pAb

Cat#: orb770313 (Manual)

For research use only. Not intended for diagnostic use.

Product Name	53BP1 rabbit pAb
Host species	Rabbit
Applications	WB;IHC;IF;ELISA
Species Cross-Reactivity	Human;Rat;Mouse;
Recommended dilutions	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/10000. Not yet tested in other applications.
Immunogen	The antiserum was produced against synthesized peptide derived from human TP53BP1. AA range:1744-1793
Specificity	53BP1 Polyclonal Antibody detects endogenous levels of 53BP1 protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide
Storage	Store at -20°C. Avoid repeated freeze-thaw cycles.
Protein Name	Tumor suppressor p53-binding protein 1
Gene Name	TP53BP1
Cellular localization	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 stand 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).



www.biorbyt.com

Purification	The antibody was affinity-purified from rabbit antiserum by affinity- chromatography using epitope-specific immunogen.
Clonality	Polyclonal
Concentration	1 mg/ml
Observed band	
Human Gene ID	7158
Human Swiss-Prot Number	Q12888
Alternative Names	TP53BP1; Tumor suppressor p53-binding protein 1; 53BP1; p53-binding protein 1; p53BP1
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 stand breaks. Methylation of histone H4 at 'Lys-20' is required for efficient localization to double strand breaks.,subunit:Interacts with IF1202A (By similarity). Binds to the central domain of TP53/p53. May form homo-oligomers. Interacts with DCLRE1C. Interacts with histone H2AFX and this requires phosphorylated at 'Lys-20'. Has low affinity for histone H4 containing monomethylated at 'Lys-20'. Has low affinity for histone H4 containing monomethylated 'Lys-20'. Has low affinity for histone H3 that has been dimethylated on 'Lys-79' (in vitro). Does not bind unmethylated histone H3.,







Immunohistochemical analysis of paraffin-embedded human Breast cancer. 1, Antibody was diluted at 1:200(4° overnight). 2, Tris-EDTA,pH9.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 45min).