

# 53BP1 Monoclonal Antibody

Catalog No	YP-mAb-00292
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB
Gene Name	TP53BP1
Protein Name	Tumor suppressor p53-binding protein 1
Immunogen	The antiserum was produced against synthesized peptide derived from human 53BP1. AA range:1-50
Specificity	53BP1 Monoclonal Antibody detects endogenous levels of 53BP1 protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-1:2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	TP53BP1; Tumor suppressor p53-binding protein 1; 53BP1; p53-binding protein 1; p53BP1
Observed Band	213kD
Cell Pathway	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:233333306, PubMed:23760478, PubMed:24703952, PubMed:28241136, PubMed:17190600). Associated with kinetochores during mitosis (By similarity).
Tissue Specificity	Cerebellum, Cervix, Epithelium, Myeloid leukemia cell, Skeletal muscle,
Function	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



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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 IFI202A (By similarity). Binds to the

#### Background

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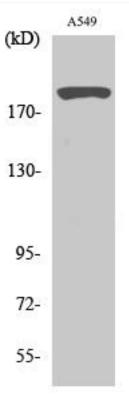
#### matters needing attention

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**



Western Blot analysis of various cells using 53BP1 Monoclonal Antibody