

## 53BP1 (Phospho Ser25) Rabbit pAb

CatalogNo: YP1140

### Key Features

#### Host Species

- Rabbit

#### Reactivity

- Human, Mouse, Rat

#### Applications

- IHC, IF, ELISA

#### MW

- 214kD (Calculated)

#### Isotype

- IgG

### Storage

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

**Formulation** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

### Recommended Dilution Ratios

**IHC 1:100-1:300**

**IF 1:200-1:1000**

**ELISA 1:10000**

**Not yet tested in other applications.**

### Basic Information

**Clonality** Polyclonal

### Immunogen Information

**Immunogen** The antiserum was produced against synthesized peptide derived from human 53BP1 around the phosphorylation site of Ser25. AA range:10-59

## Specificity

Phospho-53BP1 (S25) Polyclonal Antibody detects endogenous levels of 53BP1 protein only when phosphorylated at S25. The name of modified sites may be influenced by many factors, such as species (the modified site was not originally found in human samples) and the change of protein sequence (the previous protein sequence is incomplete, and the protein sequence may be prolonged with the development of protein sequencing technology). When naming, we will use the "numbers" in historical reference to keep the sites consistent with the reports. The antibody binds to the following modification sequence (lowercase letters are modification sites):EDsQP

## Target Information

**Gene name** TP53BP1

**Protein Name** Tumor suppressor p53-binding protein 1

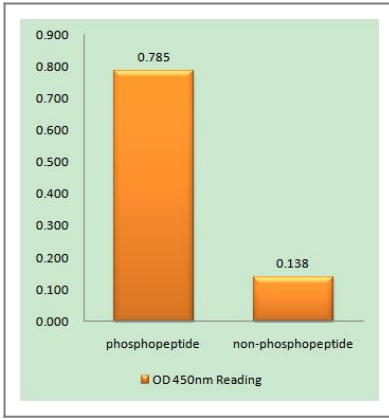
Organism	Gene ID	UniProt ID
Human	<a href="#">7158</a> ;	<a href="#">Q12888</a> ;
Mouse	<a href="#">27223</a> ;	<a href="#">P70399</a> ;

**Cellular Localization** Nucleus

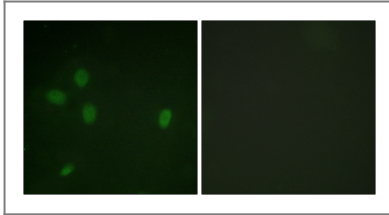
**Tissue specificity** Cerebellum ,Cervix ,Epithelium ,Myeloid leukemia cell ,Skeletal muscle ,

**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 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. ,

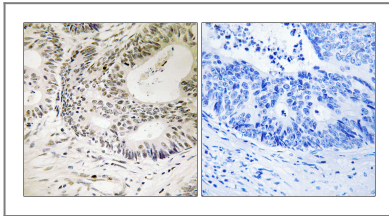
## Validation Data



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.

## Contact information

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Please scan the QR code to access additional product information:  
**53BP1 (Phospho Ser25) Rabbit pAb**

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