

**TP53BP1 Antibody**  
**Purified Mouse Monoclonal Antibody**  
**Catalog # A02318a****Specification****TP53BP1 Antibody - Product Information**

Application	<b>E, WB, FC, IHC</b>
Primary Accession	<a href="#">Q12888</a>
Reactivity	<b>Human</b>
Host	<b>Mouse</b>
Clonality	<b>Monoclonal</b>
Isotype	<b>IgG1</b>
Calculated MW	<b>213.6kDa KDa</b>

**Description**

T protein p53 binding protein 1 may have a role in checkpoint signaling during mitosis, enhance TP53-mediated transcriptional activation and play a role in the response to DNA damage.

**Immunogen**

Purified recombinant fragment of human TP53BP1 (AA: 574-773) expressed in E. Coli.

**Formulation**

Purified antibody in PBS with 0.05% sodium azide

**TP53BP1 Antibody - Additional Information**

**Gene ID** 7158

**Other Names**

Tumor suppressor p53-binding protein 1, 53BP1, p53-binding protein 1, p53BP1, TP53BP1

**Dilution**

E~~1/10000  
WB~~1/500 - 1/2000  
FC~~1/200 - 1/400  
IHC~~1/200 - 1/1000

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

TP53BP1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**TP53BP1 Antibody - Protein Information**

**Name** TP53BP1 ([HGNC:11999](#))

**Function**

Double-strand break (DSB) repair protein involved in response to DNA damage, telomere dynamics and class-switch recombination (CSR) during antibody genesis (PubMed:<a href="http://www.uniprot.org/citations/12364621" target="\_blank">12364621</a>, PubMed:<a href="http://www.uniprot.org/citations/22553214" target="\_blank">22553214</a>, PubMed:<a href="http://www.uniprot.org/citations/23333306" target="\_blank">23333306</a>, PubMed:<a href="http://www.uniprot.org/citations/17190600" target="\_blank">17190600</a>, PubMed:<a href="http://www.uniprot.org/citations/21144835" target="\_blank">21144835</a>, PubMed:<a href="http://www.uniprot.org/citations/28241136" target="\_blank">28241136</a>). Plays a key role in the repair of double-strand DNA breaks (DSBs) in response to DNA damage by promoting non-homologous end joining (NHEJ)- mediated repair of DSBs and specifically counteracting the function of the homologous recombination (HR) repair protein BRCA1 (PubMed:<a href="http://www.uniprot.org/citations/22553214" target="\_blank">22553214</a>, PubMed:<a href="http://www.uniprot.org/citations/23727112" target="\_blank">23727112</a>, PubMed:<a href="http://www.uniprot.org/citations/23333306" target="\_blank">23333306</a>). In response to DSBs, phosphorylation by ATM promotes interaction with RIF1 and dissociation from NUDT16L1/TIRR, leading to recruitment to DSBs sites (PubMed:<a href="http://www.uniprot.org/citations/28241136" target="\_blank">28241136</a>). Recruited to DSBs sites by recognizing and binding 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:<a href="http://www.uniprot.org/citations/23760478" target="\_blank">23760478</a>, PubMed:<a href="http://www.uniprot.org/citations/28241136" target="\_blank">28241136</a>, PubMed:<a href="http://www.uniprot.org/citations/17190600" target="\_blank">17190600</a>). Required for immunoglobulin class-switch recombination (CSR) during antibody genesis, a process that involves the generation of DNA DSBs (PubMed:<a href="http://www.uniprot.org/citations/23345425" target="\_blank">23345425</a>). Participates in the repair and the orientation of the broken DNA ends during CSR (By similarity). In contrast, it is not required for classic NHEJ and V(D)J recombination (By similarity). Promotes NHEJ of dysfunctional telomeres via interaction with PAXIP1 (PubMed:<a href="http://www.uniprot.org/citations/23727112" target="\_blank">23727112</a>).

### Cellular Location

Nucleus. Chromosome. Chromosome, centromere, kinetochore {ECO:0000250|UniProtKB:P70399}. Note=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) {ECO:0000250|UniProtKB:P70399, ECO:0000269|PubMed:17190600, ECO:0000269|PubMed:23333306, ECO:0000269|PubMed:23760478, ECO:0000269|PubMed:28241136}

### TP53BP1 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)