Phospho-TP53BP1-T543 Rabbit Polyclonal Antibody

CABP0861



Product Information Size:

20uL, 50uL, 100uL, 200uL

Observed MW:

Refer to figures

Calculated MW:

213kDa/214kDa

Applications:

WB

Reactivity:

Human

Antibody Information

Recommended dilutions: WB 1:500 - 1:2000

Source: Rabbit

lsotype: lgG

Purification: Affinity purification

Protein Background

Double-strand break (DSB) repair protein involved in response to DNA damage, telomere dynamics and class-switch recombination (CSR) during antibody genesis (PubMed:12364621, PubMed:22553214, PubMed:23333306, PubMed:17190600, PubMed:21144835, PubMed:28241136). 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:22553214, PubMed:23727112, PubMed:23333306). In response to DSBs, phosphorylation by ATM promotes interaction with RIF1 and dissociation from NUDT16L1/TIRR, leading to recruitment to DSBs sites (PubMed:28241136). 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 (PubMed:23760478, sites PubMed:28241136, PubMed:17190600). Required for immunoglobulin class-switch recombination (CSR) during antibody genesis, a process that involves the generation of DNA DSBs (PubMed:23345425). Participates to 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:23727112).

Immunogen information

Gene ID: 7158

Uniprot Q12888

Synonyms:

TP53BP1; 53BP1; TDRD30; TP53; p202; p53BP1

Immunogen:

A synthetic phosphorylated peptide around T543 of human TP53BP1 (NP_001135451.1).

Storage:

Store at -20°C. Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3.