

## Immunotag™ Phospho-53BP1 (Thr543) Antibody

Antibody Specification	
Catalog No.	ITA3868
Product Description	Immunotag™ Phospho-53BP1 (Thr543) Antibody
Size	100 µg, 200 µg
Conjugation	HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647
IMPORTANT NOTE	This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return.
Target Protein	Phospho-53BP1 (Thr543)
Clonality	Polyclonal
Storage/Stability	-20°C/1 year
Application	WB,IF/ICC,ELISA
Recommended Dilution	WB 1:1000-3000, IF/ICC 1:100-1:500
Concentration	1 mg/ml
Reactive Species	Human
Host Species	Rabbit
Immunogen	A synthesized peptide derived from human Phospho-53BP1 (Thr543)
Specificity	Phospho-53BP1 (Thr543) Antibody detects endogenous levels of 53BP1 only when phosphorylated at Thr543
Purification	The antibody is from purified rabbit serum by affinity purification via sequential chromatography on phospho- and non-phospho-peptide affinity columns.
Form	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.Store at -20 °C.Stable for 12 months from date of receipt
Gene Name	TP53BP1
Accession No.	Q12888
Alternate Names	53 BP1; 53BP1; FLJ41424; MGC138366; p202; p53 binding protein 1; p53 BP1; p53-binding protein 1; p53BP1; TP53 BP1; TP53B_HUMAN; Tp53bp1; TRP53 BP1; Tumor protein 53 binding protein 1; Tumor protein p53 binding protein 1; Tumor suppressor p53 binding protein 1; Tumor suppressor p53-binding protein 1;

## Antibody Specification

Description	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 sites (PubMed:23760478, 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).
Cell Pathway/ Category	Primary Polyclonal Antibody
Protein MW	220KD
Usage	For Research Use Only! Not for diagnostic or therapeutic procedures.