



TOPBP1 rabbit pAb

Catalog No	YP-Ab-12546
Isotype	IgG
Reactivity	Human; Mouse; Rat
Applications	WB
Gene Name	TOPBP1 KIAA0259
Immunogen	Synthesized peptide derived from human TOPBP1
Specificity	This antibody detects endogenous levels of TOPBP1 at Human, Mouse, Rat
Formulation	Liquid in PBS containing 50% glycerol, and 0.33% sodium azide.
Source	Polyclonal, Rabbit, IgG
Purification	The antibody was affinity-purified from rabbit serum by affinity-chromatography using specific immunogen.
Dilution	WB 1:500-2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	KIAA0259; TOP2BP1; TOPBP1; TOPBP1 KIAA0259; DNA topoisomerase 2-binding protein 1 (DNA topoisomerase II-beta-binding protein 1) (TopBP1) (DNA topoisomerase II-binding protein 1)
Observed Band	171 kDa
Calculated Molecular Weight	1522 aa, 171 kDa
Cell Pathway	Nucleus. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Cytoplasm, cytoskeleton, spindle pole. Chromosome. Detected on unpaired autosomes in meiotic prophase cells. Detected on X and Y chromosomes during later stages of prophase. Colocalizes with ATR and H2AX at unsynapsed chromosome cores during prophase (By similarity). Has a uniform nuclear distribution during G phase. Colocalizes with BRCA1 at stalled replication forks during S phase. In mitotic cells it colocalizes with BRCA1 at spindle poles and centrosomes during metaphase and anaphase. Detected in discrete foci together with PML and numerous DNA repair enzymes after DNA damage by alkylating agents, UV or gamma irradiation. Localizes to sites of DNA damage in a H2AX-independent manner. .
Tissue Specificity	Highly expressed in heart, brain, placenta, lung and kidney.



Function	function:Required for DNA replication. Plays a role in the rescue of stalled replication forks and checkpoint control. Binds double-stranded DNA breaks and nicks as well as single-stranded DNA. Recruits the SWI/SNF chromatin remodeling complex to E2F1-responsive promoters. Down-regulates E2F1 activity and inhibits E2F1-dependent apoptosis during G1/S transition and after DNA damage. Induces a large increase in the kinase activity of ATR., induction:Up-regulated during the S phase of the cell cycle. Up-regulated by E2F1 and interferon.,PTM:Phosphorylated on serine and threonine residues in response to X-ray irradiation.,PTM:Ubiquitinated and degraded by the proteasome. X-ray irradiation reduces ubiquitination.,similarity:Contains 8 BRCT domains.,subcellular location:Detected on unpaired autosomes in meiotic prophase cells. Detected on X and Y chromosomes during later stages of prophase. Co
Background	This gene encodes a binding protein which interacts with the C-terminal region of topoisomerase II beta. This interaction suggests a supportive role for this protein in the catalytic reactions of topoisomerase II beta through transient breakages of DNA strands. [provided by RefSeq, Jul 2008],
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.

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