

Anti-TopBP1 antibody ab2402

★★★★☆ [15 Abreviews](#) [40 References](#) [3 Images](#)

Overview

Product name	Anti-TopBP1 antibody
Description	Rabbit polyclonal to TopBP1
Host species	Rabbit
Tested applications	Suitable for: WB, IP
Species reactivity	Reacts with: Mouse, Human
Immunogen	Synthetic peptide within Human TopBP1 aa 1400-1500. The exact immunogen sequence used to generate this antibody is proprietary information. If additional detail on the immunogen is needed to determine the suitability of the antibody for your needs, please contact our Scientific Support team to discuss your requirements. NP_008958.1 (GeneID 11073). Database link: Q92547
Positive control	WB: HeLa, HEK-293T, TCMK-1, NIH/3T3 and Jurkat whole cell lysate. IP: TopBP1 in HeLa whole cell lysate.
General notes	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Avoid freeze / thaw cycle.
Storage buffer	pH: 7 Preservative: 0.1% Sodium azide Constituents: 0.021% PBS, 1.764% Sodium citrate, 1.815% Tris
Purity	Immunogen affinity purified
Purification notes	Antibody was affinity purified using the peptide immobilized on solid support. Antibody concentration was determined by extinction coefficient: absorbance at 280 nm of 1.4 equals 1.0

	mg of IgG.
Clonality	Polyclonal
Isotype	IgG

Applications

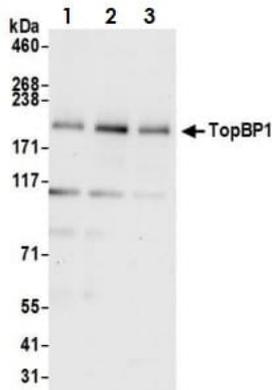
The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab2402 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB	★★★★★ (8)	1/2000 - 1/10000. Detects a band of approximately 200 kDa (predicted molecular weight: 173.3 kDa).
IP	★★★★★ (2)	Use at 2-5 µg/mg of lysate.

Target

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.
Tissue specificity	Highly expressed in heart, brain, placenta, lung and kidney.
Sequence similarities	Contains 8 BRCT domains.
Post-translational modifications	Phosphorylated on serine and threonine residues in response to X-ray irradiation. Ubiquitinated and degraded by the proteasome. X-ray irradiation reduces ubiquitination.
Cellular localization	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 H2AFX 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.

Images



Western blot - Anti-TopBP1 antibody (ab2402)

All lanes : Anti-Cytokeratin 10 antibody [LHP1] (**ab2409**) at 0.1 $\mu\text{g/ml}$

Lane 1 : HeLa (Human epithelial cell line from cervix adenocarcinoma) whole cell lysate

Lane 2 : HEK-293T (Human epithelial cell line from embryonic kidney transformed with large T antigen) whole cell lysate

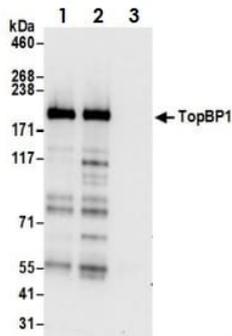
Lane 3 : Jurkat (Human T cell leukemia cell line from peripheral blood) whole cell lysate

Lysates/proteins at 15 μg per lane.

Predicted band size: 173.3 kDa

Exposure time: 10 seconds

Lysates prepared using NETN lysis buffer.



Immunoprecipitation - Anti-TopBP1 antibody (ab2402)

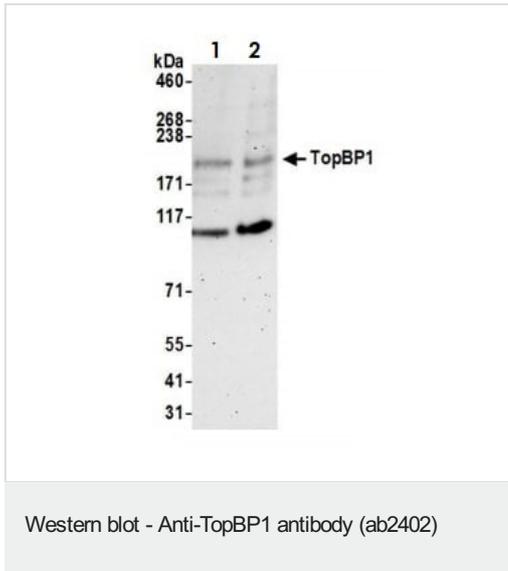
Samples: Whole cell lysate (1.0 mg per IP reaction; 20% of IP loaded) from HeLa cells prepared using NETN lysis buffer.

Antibodies: **ab2409** used for IP at 3 μg per reaction.

Two lots tested (Lanes 1 and 2).

Lane 3 is Control IgG.

For blotting immunoprecipitated TopBP1, **ab2409** was used at 0.4 $\mu\text{g/ml}$. Detection: Chemiluminescence with an exposure time of 10 seconds.



All lanes : Anti-Cytokeratin 10 antibody [LHP1] ([ab2409](#)) at 0.1 $\mu\text{g/ml}$

Lane 1 : TCMK-1 (Mouse kidney epithelial cell line) whole cell lysate

Lane 2 : NIH/3T3 (Mouse embryonic fibroblast cell line) whole cell lysate

Lysates/proteins at 50 μg per lane.

Predicted band size: 173.3 kDa

Exposure time: 3 minutes

Lysates prepared using NETN lysis buffer.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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