

## Product datasheet

### Anti-53BP1 antibody [BL-250-1H11] **ab243868**

Recombinant

5 Images

#### Overview

<b>Product name</b>	Anti-53BP1 antibody [BL-250-1H11]
<b>Description</b>	Rabbit monoclonal [BL-250-1H11] to 53BP1
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> IP, WB, IHC-P
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Human
<b>Immunogen</b>	Synthetic peptide within Human 53BP1 aa 350-400. The exact sequence is proprietary. NP_005648.1 and Gene ID 7158. Database link: <a href="#"><b>Q12888</b></a>
<b>Positive control</b>	WB: HeLa, HEK-293T, MCF7, HepG2, A549, SW620, SK-MEL-28, Jurkat whole cell lysates. IHC: mouse renal cell carcinoma, human colon carcinoma IP: HEK-293T (Human epithelial cell line from embryonic kidney transformed with large T antigen) whole cell lysate
<b>General notes</b>	This product is sold under License from Bethyl Laboratories, Inc.

#### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
<b>Storage buffer</b>	pH: 7.8 Preservative: 0.09% Sodium azide Constituents: 98% Borate buffered saline, 0.1% BSA
<b>Purification notes</b>	Recombinant antibody was purified from cell culture supernatant.
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	BL-250-1H11
<b>Isotype</b>	IgG

#### Applications

## The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab243868 in the following tested applications.

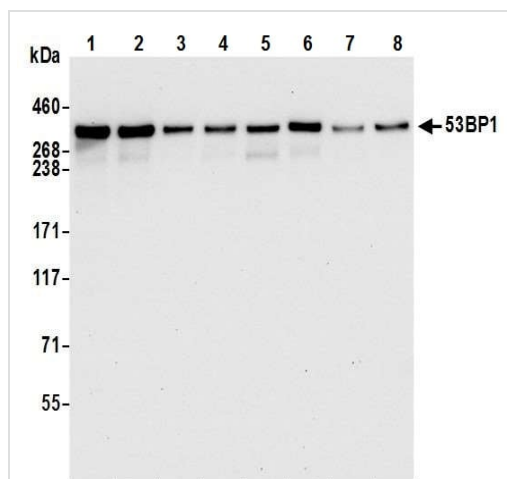
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IP		Use at an assay dependent concentration. Use 20µl/mg lysate.
WB		1/1000.
IHC-P		1/100 - 1/500. Epitope retrieval with citrate buffer pH6.0 is recommended for Formalin-fixed, paraffin-embedded tissue sections

## Target

<b>Function</b>	May have a role in checkpoint signaling during mitosis. Enhances TP53-mediated transcriptional activation. Plays a role in the response to DNA damage.
<b>Involvement in disease</b>	Note=A chromosomal aberration involving TP53BP1 is found in a form of myeloproliferative disorder chronic with eosinophilia. Translocation t(5;15)(q33;q22) with PDGFRB creating a TP53BP1-PDGFRB fusion protein.
<b>Sequence similarities</b>	Contains 2 BRCT domains.
<b>Post-translational modifications</b>	Asymmetrically dimethylated on Arg residues by PRMT1. Methylation is required for DNA binding. Phosphorylated at basal level in the absence of DNA damage. Hyper-phosphorylated in an ATM-dependent manner in response to DNA damage induced by ionizing radiation. Hyper-phosphorylated in an ATR-dependent manner in response to DNA damage induced by UV irradiation.
<b>Cellular localization</b>	Nucleus. Chromosome > centromere > kinetochore. Associated with kinetochores. Both nuclear and cytoplasmic in some cells. Recruited to sites of DNA damage, such as double strand breaks. Methylation of histone H4 at 'Lys-20' is required for efficient localization to double strand breaks.

## Images



Western blot - Anti-53BP1 antibody [BL-250-1H11]  
(ab243868)

Western blot analysis using ab243868 at 1/1000 dilution.

Lane 1: HeLa whole cell lysate (15 µg).

Lane 2: HEK-293T whole cell lysate (15 µg).

Lane 3: MCF7 whole cell lysate (15 µg).

Lane 4: HepG2 whole cell lysate (15 µg).

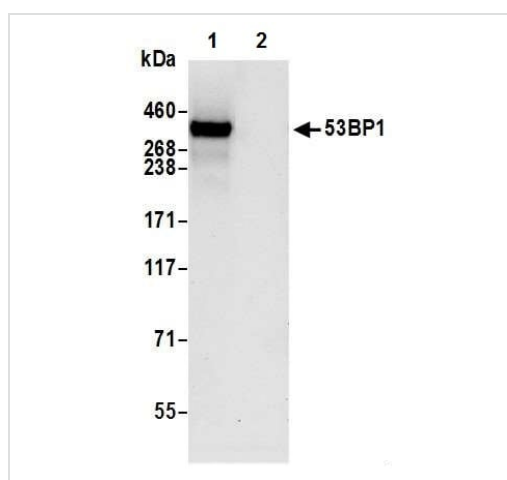
Lane 5: A549 whole cell lysate (15 µg).

Lane 6: SW620 whole cell lysate (15 µg).

Lane 7: SK whole cell lysate (15 µg).

Lane 8: Jurkat whole cell lysate (15 µg).

A HRP-conjugated goat anti-rabbit IgG antibody was used as the secondary. Detection: chemiluminescence with an exposure time of 10 seconds



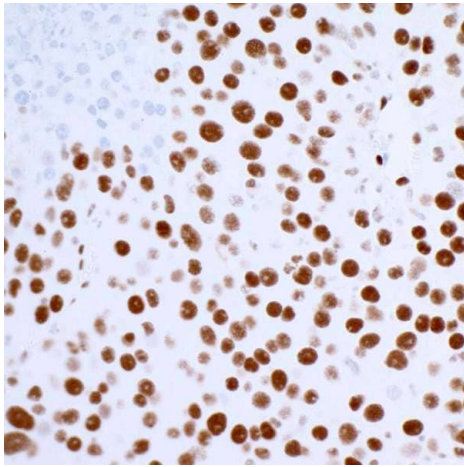
Immunoprecipitation - Anti-53BP1 antibody [BL-250-1H11] (ab243868)

53BP1 was immunoprecipitated from 1 mg HEK-293T whole cell lysate with ab243868 at 20 µl per reaction. Western blot was performed on the immunoprecipitate using ab243868 at 1/1000 dilution.

Lane 1: ab243868 IP in HEK-293T cell lysate.

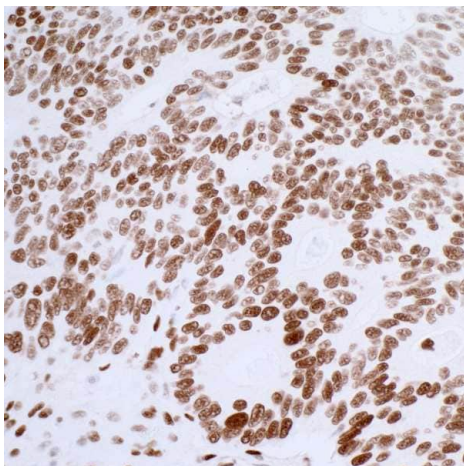
Lane 2: Control IgG in HEK-293T cell lysate.

Detection: Chemiluminescence with an exposure time of 10 seconds.



Formalin-fixed, paraffin-embedded mouse renal cell carcinoma stained using ab243868 at 1/250 dilution in immunohistochemical analysis. A HRP-conjugated goat anti-rabbit IgG was used as the secondary. DAB staining.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-53BP1 antibody [BL-250-1H11] (ab243868)



*Formalin-fixed, paraffin-embedded human colon carcinoma tissue stained using ab243868 at 1/250 dilution in immunohistochemical analysis. A HRP-conjugated goat anti-rabbit IgG was used as the secondary. DAB staining.*

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-53BP1 antibody [BL-250-1H11] (ab243868)

### Why choose a recombinant antibody?



**Research with confidence**  
Consistent and reproducible results



**Long-term and scalable supply**  
Recombinant technology



**Success from the first experiment**  
Confirmed specificity



**Ethical standards compliant**  
Animal-free production

Anti-53BP1 antibody [BL-250-1H11] (ab243868)

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

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- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

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