abcam

Product datasheet

Anti-Cleaved PARP1 antibody ab4830

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Overview

Product name	Anti-Cleaved PARP1 antibody
Description	Rabbit polyclonal to Cleaved PARP1
Host species	Rabbit
Specificity	This antibody specifically recognizes the 85 kDa fragment of cleaved PARP1 and can be used as marker for detecting apoptotic cells. Cleavage site specific antibody, unconjugated. The antiserum was produced against a chemically synthesized peptide corresponding to the N-terminus of cleavage site (214/215) of human PARP1 and will recognize Asp 214 and Gly 215.
Tested applications	**Suitable for:** WB
Species reactivity	**Reacts with:** Human
Immunogen	Synthetic peptide corresponding to Human Cleaved PARP1. (Peptide available as **ab10779**)
Positive control	WB: THP1 Nuclear Enriched, HeLa Nuclear Enriched, KARPAS-299 and Daudi cell lysate. HeLa and Jurkat cells.
General notes	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. 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

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
Storage buffer	pH: 7.3 Preservative: 0.05% Sodium azide Constituents: PBS, 50% Glycerol, 0.1% BSA BSA is IgG and protease free

Purity	Immunogen affinity purified
Purification notes	Purified from rabbit serum by sequential epitope-specific chromatography. The antibody has been negatively preadsorbed using a peptide spanning the cleavage site to remove antibody that is reactive with full length PARP1. The final product is generated by affinity chromatography using a peptide corresponding to the PARP1 cleavage site.
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab4830 in the following tested applications.

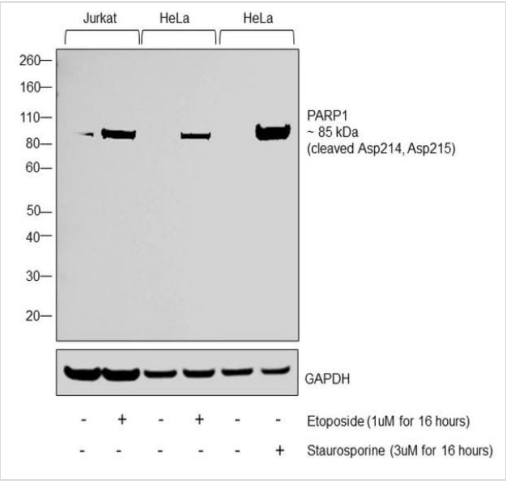
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB	★★★★★ **(4)**	1/1000. Detects a band of approximately 85 kDa (predicted molecular weight: 85 kDa).

Target

Function	Involved in the base excision repair (BER) pathway, by catalyzing the poly(ADP-ribosyl)ation of a limited number of acceptor proteins involved in chromatin architecture and in DNA metabolism. This modification follows DNA damages and appears as an obligatory step in a detection/signaling pathway leading to the reparation of DNA strand breaks. Mediates the poly(ADP-ribosyl)ation of APLF and CHFR. Positively regulates the transcription of MTUS1 and negatively regulates the transcription of MTUS2/TIP150. With EEF1A1 and TXK, forms a complex that acts as a T-helper 1 (Th1) cell-specific transcription factor and binds the promoter of IFN-gamma to directly regulate its transcription, and is thus involved importantly in Th1 cytokine production. Required for PARP9 and DTX3L recruitment to DNA damage sites. PARP1-dependent PARP9-DTX3L-mediated ubiquitination promotes the rapid and specific recruitment of 53BP1/TP53BP1, UIMC1/RAP80, and BRCA1 to DNA damage sites.
Sequence similarities	Contains 1 BRCT domain. Contains 1 PARP alpha-helical domain. Contains 1 PARP catalytic domain. Contains 2 PARP-type zinc fingers.
Post-translational modifications	Phosphorylated by PRKDC and TXK. Poly-ADP-ribosylated by PARP2. Poly-ADP-ribosylation mediates the recruitment of CHD1L to DNA damage sites. S-nitrosylated, leading to inhibit transcription regulation activity.
Cellular localization	Nucleus. Nucleus, nucleolus. Localizes at sites of DNA damage.

Images



Western blot - Anti-Cleaved PARP1 antibody (ab4830)

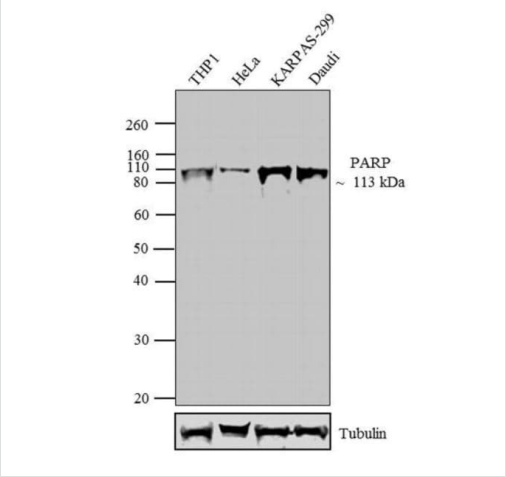
All lanes : Anti-Cleaved PARP1 antibody (ab4830) at 1/1000 dilution

Lane 1 : Jurkat cell lysate
Lane 2 : Jurkat cells treated with Etoposide (1 µM for 16 hours)
Lanes 3 & 5 : HeLa cell lysate
Lane 4 : HeLa cells treated with Etoposide (1 µM for 16 hours)
Lane 6 : HeLa cells treated with Staurosporine (3 µM for 16 hours)

Lysates/proteins at 40 µg per lane.

Secondary
All lanes : Goat anti-Rabbit IgG (H+L) Superclonal™ Recombinant Secondary Antibody, HRP at 1/14000 dilution

Predicted band size: 85 kDa



Western blot - Anti-Cleaved PARP1 antibody (ab4830)

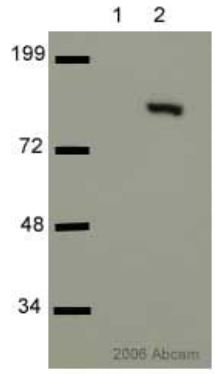
All lanes : Anti-Cleaved PARP1 antibody (ab4830) at 1/2000 dilution

Lane 1 : THP1 Nuclear Enriched
Lane 2 : HeLa Nuclear Enriched
Lane 3 : KARPAS-299
Lane 4 : Daudi cell lysate

Lysates/proteins at 30 µg per lane.

Secondary
All lanes : Anti-Rabbit IgG (H+L) Superclonal™ Secondary Antibody, HRP conjugate at 1/2500 dilution

Predicted band size: 85 kDa



Western blot - Anti-Cleaved PARP1 antibody (ab4830)

This image is courtesy of an Abreview submitted by Adam Szadkowski on 26 January 2006.

All lanes : Anti-Cleaved PARP1 antibody (ab4830) at 1/1000 dilution

Lane 1 : Non-induced Jurkat cells
Lane 2 : Induced Jurkat cells

Secondary
All lanes : Goat Anti-Rabbit HRP

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 85 kDa
Observed band size: 85 kDa

Exposure time: 5 seconds

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