

Datasheet for ABIN7163739  
**anti-PARP1 antibody (AA 324-541)**



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3 Images

## Overview

Quantity:	100 µL
Target:	PARP1
Binding Specificity:	AA 324-541
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This PARP1 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (IHC), Immunofluorescence (IF)

## Product Details

Immunogen:	Recombinant Human Poly [ADP-ribose] polymerase 1 protein (324-541aa)
Isotype:	IgG
Cross-Reactivity:	Human
Purification:	Antigen Affinity Purified

## Target Details

Target:	PARP1
Alternative Name:	PARP1 ( <a href="#">PARP1 Products</a> )
Background:	Background: 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

## Target Details

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 (PubMed:17177976, PubMed:18172500, PubMed:19344625, PubMed:19661379, PubMed:23230272). Mediates the poly(ADP-ribosyl)ation of APLF and CHFR (PubMed:17396150). 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 (PubMed:17177976). Required for PARP9 and DTX3L recruitment to DNA damage sites (PubMed:23230272). PARP1-dependent PARP9-DTX3L-mediated ubiquitination promotes the rapid and specific recruitment of 53BP1/TP53BP1, UIMC1/RAP80, and BRCA1 to DNA damage sites (PubMed:23230272). Mediates serine ADP-ribosylation of target proteins following interaction with HPF1, HPF1 conferring serine specificity (PubMed:28190768). Mediates the poly(ADP-ribosyl)ation of histones in a HPF1-dependent manner (PubMed:27067600). Involved in the synthesis of ATP in the nucleus, together with NMNAT1, PARG and NUDT5 (PubMed:27257257). Nuclear ATP generation is required for extensive chromatin remodeling events that are energy-consuming (PubMed:27257257).

Aliases: ADP ribosyltransferase (NAD<sup>+</sup>, poly (ADP ribose) polymerase) antibody, ADP ribosyltransferase antibody, ADP ribosyltransferase diphtheria toxin like 1 antibody, ADP ribosyltransferase NAD(+) antibody, ADPRT 1 antibody, ADPRT antibody, ADPRT1 antibody, ARTD1 antibody, msPARP antibody, NAD(+) ADP ribosyltransferase 1 antibody, NAD(+) ADP-ribosyltransferase 1 antibody, pADPRT 1 antibody, pADPRT-1 antibody, pADPRT1 antibody, PARP 1 antibody, PARP antibody, PARP-1 antibody, PARP1 antibody, PARP1\_HUMAN antibody, Poly (ADP ribose) polymerase 1 antibody, poly (ADP ribose) polymerase family, member 1 antibody, Poly (ADP-ribose) polymerase 1 antibody, Poly [ADP-ribose] polymerase 1 antibody, Poly(ADP ribose) polymerase antibody, poly(ADP ribose) synthetase antibody, poly(ADP ribosyl)transferase antibody, Poly(ADP-ribosyl)transferase antibody, Poly[ADP ribose] synthetase 1 antibody, Poly[ADP-ribose] synthase 1 antibody, PPOL antibody, sPARP 1 antibody, sPARP1 antibody

UniProt: [P09874](#)

Pathways: [Apoptosis](#), [Caspase Cascade in Apoptosis](#), [DNA Damage Repair](#), [Production of Molecular Mediator of Immune Response](#), [Maintenance of Protein Location](#)

## Application Details

Application Notes: Recommended dilution: WB:1:1000-1:5000, IHC:1:100-1:500, IF:1:100-1:500,

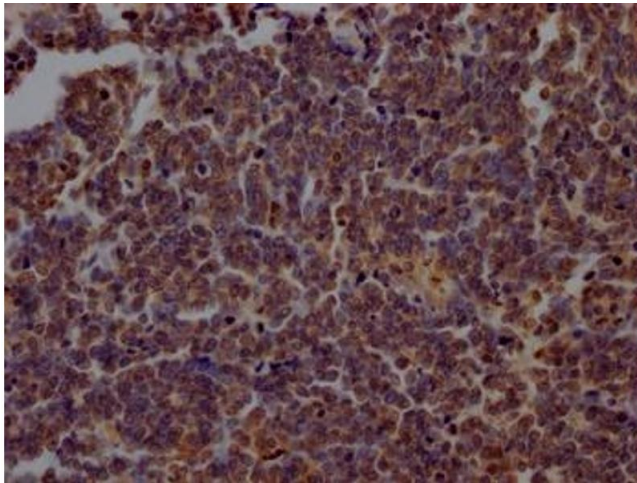
## Application Details

Restrictions: For Research Use only

## Handling

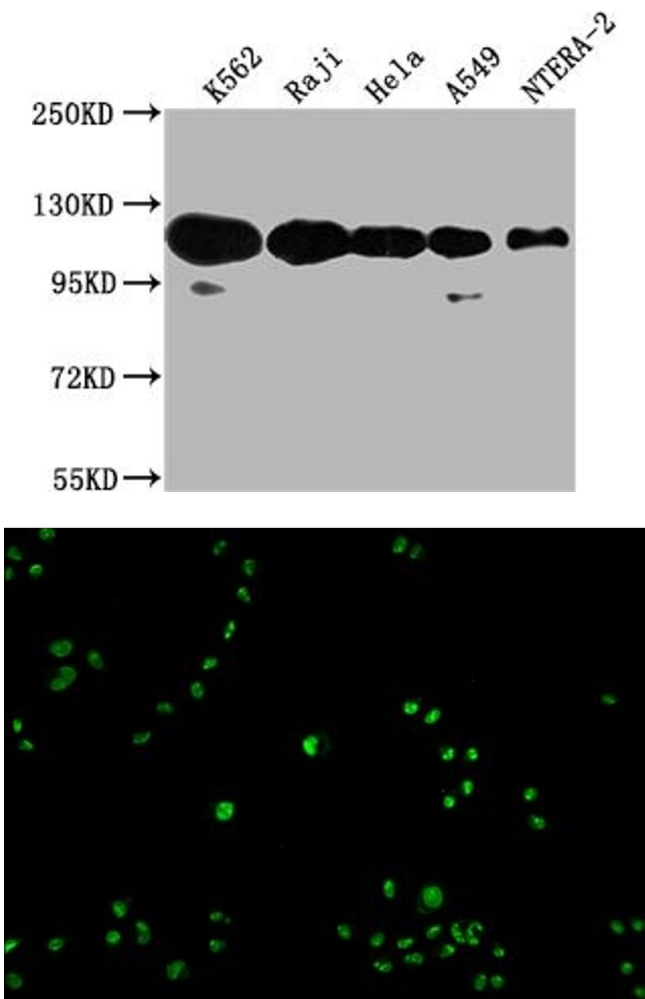
Format:	Liquid
Buffer:	Preservative: 0.03 % Proclin 300 Constituents: 50 % Glycerol, 0.01M PBS, PH 7.4
Preservative:	ProClin
Precaution of Use:	This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C,-80 °C
Storage Comment:	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.

## Images



### Immunohistochemistry

**Image 1.** IHC image of ABIN7163739 diluted at 1:200 and staining in paraffin-embedded human lung cancer performed on a Leica Bond™ system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10 % normal goat serum 30 min at RT. Then primary antibody (1 % BSA) was incubated at 4 °C overnight. The primary is detected by a Goat anti-rabbit polymer IgG labeled by HRP and visualized using 0.05 % DAB.



Western Blotting

**Image 2.** Western Blot Positive WB detected in: K562 whole cell lysate, Raji whole cell lysate, HeLa whole cell lysate, A549 whole cell lysate, NTERA-2 whole cell lysate All lanes: PARP1 antibody at 1:2000 Secondary Goat polyclonal to rabbit IgG at 1/50000 dilution Predicted band size: 114 kDa Observed band size: 114 kDa

Immunofluorescence

**Image 3.** Immunofluorescence staining of HeLa cells with ABIN7163739 at 1:100, counter-stained with DAPI. The cells were fixed in 4 % formaldehyde and blocked in 10 % normal Goat Serum. The cells were then incubated with the antibody overnight at 4 °C. The secondary antibody was Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).