ARG20041
anti-PARP (cleaved) antibody

Package: 50 µg, 25 µg
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes PARP (cleaved)
Tested Reactivity	Hu
Tested Application	IHC-P, WB
Specificity	The antibody recognizes only the large fragment of PARP (89 kDa) and does not react with the full length PARP.
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	PARP (cleaved)
Species	Human
Immunogen	Synthetic peptide correspond to the N-terminal residues of the catalytic domain of human PARP
Conjugation	Un-conjugated
Alternate Names	EC 2.4.2.30; Poly[ADP-ribose] synthase 1; PPOL; ADPRT; ARTD1; NAD; PARP-1; ADPRT 1; Poly [ADP-ribose] polymerase 1; PARP; ADP-ribosyltransferase diphtheria toxin-like 1; ADPRT1; pADPRT-1

Application Instructions

Application table

Application	Dilution
IHC-P	Assay-dependent
WB	0.5-4 µg/ml

Application Note: * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Positive Control: Camptothecin treated Jurkat cell lysate

Properties

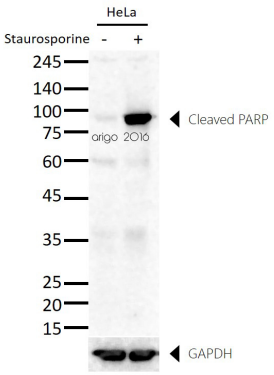
Form	Liquid
Purification	Affinity Purified Antibody
Buffer	PBS, 50% Glycerol, 1% BSA and 0.02% Thimerosal
Preservative	0.02% Thimerosal
Stabilizer	50% Glycerol, 1% BSA
Concentration	0.2 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Database links	GeneID: 142 Human Swiss-port # P09874 Human
Gene Symbol	PARP1
Gene Full Name	poly (ADP-ribose) polymerase 1
Background	PARP, a 116 kDa nuclear poly (ADP-ribose) polymerase, is a highly conserved nuclear enzyme implicated in DNA repair and in the apoptosis response of cells. This protein can be cleaved by many caspases in vitro and is one of the main cleavage targets of caspase-3 in vivo. The cleavage occurs between ASP214 and Gly 215, which separates PARP's N-terminal DNA binding domain (24 kDa) from its C-terminal catalytic domain (89 kDa). It has been shown that cleavage of PARP facilitates cellular disassembly and inhibition of PARP cleavage attenuates apoptosis in vitro.
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. [UniProt]
Highlight	Related Antibody Duos and Panels: ARG30105 Apoptosis Marker Antibody Duo (Caspase3, PARP) ARG30110 Mitochondria/Caspase dependant Apoptosis Antibody Panel (Caspase3, Caspase9, Cytochrome c, PARP) (WB) Related products: PARP antibodies; PARP Duos / Panels; Anti-Rabbit IgG secondary antibodies; Related news: SM5-1, a promising immunotherapy for Hepatocellular Carcinoma (HCC) Choose the Best ZIKA Virus Antibodies Fight microcephaly with arigo
Research Area	Cancer antibody; Cell Biology and Cellular Response antibody; Cell Death antibody; Gene Regulation antibody; Metabolism antibody; Apoptosis Marker antibody; Mitochondria/Caspase Dependant Apoptosis Marker antibody
Calculated Mw	113 kDa
PTM	Phosphorylated by PRKDC and TXK. Poly-ADP-ribosylated by PARP2; poly-ADP-ribosylation mediates the recruitment of CHD1L to DNA damage sites (PubMed:19661379). ADP-ribosylated on serine by autocatalysis; serine ADP-ribosylation takes place following interaction with HPF1 (PubMed:28190768). S-nitrosylated, leading to inhibit transcription regulation activity.

Images



ARG20041 anti-PARP (cleaved) antibody WB image

Western blot: 30 µg of HeLa untreated or treated with Staurosporine and stained with ARG20041 anti-PARP (cleaved) antibody at 1:500 dilution.