ARG65772
anti-PARP antibody

Package: 100 µg, 50 µg
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody recognizes PARP
Tested Reactivity	Hu
Tested Application	WB
Host	Mouse
Clonality	Monoclonal
Isotype	IgG
Target Name	PARP
Species	Human
Immunogen	Synthetic peptide from 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
WB	1:2000 - 1:5000

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

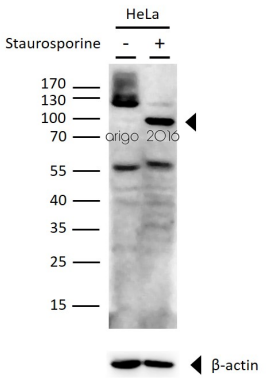
Properties

Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	PBS (pH 7.4), 0.02% Sodium azide and 50% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol
Concentration	1 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	This gene encodes a chromatin-associated enzyme, poly(ADP-ribosyl)transferase, which modifies various nuclear proteins by poly(ADP-ribosyl)ation. The modification is dependent on DNA and is involved in the regulation of various important cellular processes such as differentiation, proliferation, and tumor transformation and also in the regulation of the molecular events involved in the recovery of cell from DNA damage. In addition, this enzyme may be the site of mutation in Fanconi anemia, and may participate in the pathophysiology of type I diabetes. [provided by RefSeq, Jul 2008]
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]
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



ARG65772 anti-PARP antibody WB image

Western blot: 30 µg of HeLa cells untreated or treated with Staurosporine (1µM, over night). The blots were stained with ARG65772 anti-PARP antibody at 1:2000 dilution.