



# PARP-3 Polyclonal Antibody

<b>Catalog No</b>	YP-Ab-00484
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Rat;Mouse;
<b>Applications</b>	IHC;IF;ELISA
<b>Gene Name</b>	PARP3
<b>Protein Name</b>	Poly [ADP-ribose] polymerase 3
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human PARP3. AA range:10-59
<b>Specificity</b>	PARP-3 Polyclonal Antibody detects endogenous levels of PARP-3 protein.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source</b>	Polyclonal, Rabbit,IgG
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Dilution</b>	IHC: 1/100 - 1/300. ELISA: 1/5000.. IF 1:50-200
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	PARP3; ADPRT3; ADPRTL3; Poly [ADP-ribose] polymerase 3; PARP-3; hPARP-3; ADP-ribosyltransferase diphtheria toxin-like 3; ARTD3; IRT1; NAD(+) ADP-ribosyltransferase 3; ADPRT-3; Poly[ADP-ribose] synthase 3; pADPRT-3
<b>Observed Band</b>	
<b>Cell Pathway</b>	Nucleus . Chromosome . Cytoplasm, cytoskeleton, microtubule organizing center, centrosome . Cytoplasm, cytoskeleton, microtubule organizing center, centrosome, centriole . Almost exclusively localized in the nucleus and appears in numerous small foci and a small number of larger foci whereas a centrosomal location has not been detected (PubMed:16924674). In response to DNA damage, localizes to sites of double-strand break (PubMed:21270334). Preferentially localized to the daughter centriole (PubMed:10329013). .
<b>Tissue Specificity</b>	Widely expressed; the highest levels are in the kidney, skeletal muscle, liver, heart and spleen; also detected in pancreas, lung, placenta, brain, leukocytes, colon, small intestine, ovary, testis, prostate and thymus.
<b>Function</b>	catalytic activity:NAD(+) + (ADP-D-ribose)(n)-acceptor = nicotinamide + (ADP-D-ribose)(n+1)-acceptor.,domain:According to PubMed:10329013 the N-terminal domain (54 amino acids) of isoform 2 is responsible for its centrosomal localization. The C-terminal region contains the catalytic domain.,function:Involved in the base excision repair (BER) pathway, by catalyzing the poly(ADP-ribosylation) 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. May link the DNA damage surveillance network to the mitotic fidelity checkpoint. Negatively influences the G1/S cell cycle progression without interfering with centrosome duplication. Binds DNA. May be involved in the regulation of PRC2 and PRC3 comple

#### Background

The protein encoded by this gene belongs to the PARP family. These enzymes modify nuclear proteins by poly-ADP-ribosylation, which is required for DNA repair, regulation of apoptosis, and maintenance of genomic stability. This gene encodes the poly(ADP-ribosyl)transferase 3, which is preferentially localized to the daughter centriole throughout the cell cycle. Alternatively spliced transcript variants encoding different isoforms have been identified. [provided by RefSeq, Jul 2008],

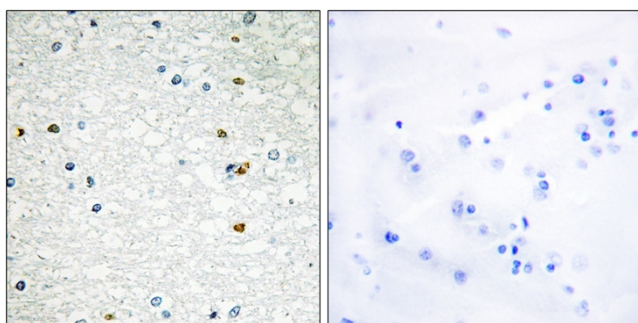
#### matters needing attention

Avoid repeated freezing and thawing!

#### Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

### Products Images



Immunohistochemistry analysis of paraffin-embedded human brain, using PARP3 Antibody. The picture on the right is blocked with the synthesized peptide.