



PARP-3 Polyclonal Antibody

Catalog No	YP-Ab-00484
Isotype	IgG
Reactivity	Human;Rat;Mouse;
Applications	IHC;IF;ELISA
Gene Name	PARP3
Immunogen	The antiserum was produced against synthesized peptide derived from human PARP3. AA range:10-59
Specificity	PARP-3 Polyclonal Antibody detects endogenous levels of PARP-3 protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	IHC: 1/100 - 1/300. ELISA: 1/5000.. IF 1:50-200
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	hPARP 3;EC:2.4.2.-;DNA ADP-ribosyltransferase PARP3;ARTD3;ADPRT3; PARP-3;PARP3;Poly [ADP-ribose] polymerase 3;ADPRTL3;hPARP-3;ADP-ribosyltransferase diphtheria toxin-like 3;IRT1;NAD(+) ADP-ribosyltransferase 3; ADPRT-3;Poly[ADP-ribose] synthase 3;pADPRT-3
Observed Band	
Calculated Molecular Weight	
Cell Pathway	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). .
Tissue Specificity	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.



Function

catalytic activity: NAD(+) + (ADP-D-ribosyl)(n)-acceptor = nicotinamide + (ADP-D-ribosyl)(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-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. 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 complex

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],

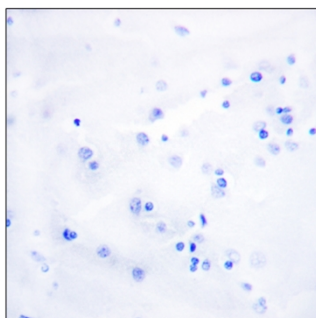
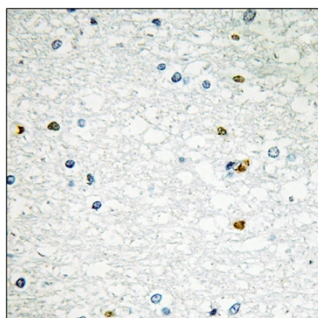
matters needing attention

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.