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Mouse Anti-Cleaved PARP1 antibody

SLM-33151M

Product Name	Cleaved PARP1
Chinese Name	多腺苷二磷酸多聚酶/多聚 ADP-核糖聚合酶 1 单克隆抗体
Alias	ADP ribosyltransferase (NAD+; poly (ADP ribose) polymerase); ADP ribosyltransferase NAD+; ADPRT 1; ADPRT; ADPRT1; msPARP; NAD(+) ADP ribosyltransferase 1; pADPRT 1; pADPRT1; PARP 1; PARP; Poly (ADP ribose) polymerase 1; poly (ADP ribose) polymerase family, member 1; Poly adenosine diphosphate ADP ribose polymerase; Poly ADP ribose polymerase 1; Poly ADP ribose polymerase family member 1; Poly ADP ribose synthetase 1; poly(ADP ribose) synthetase; poly(ADP ribosyl)transferase; Poly[ADP ribose] synthetase 1; PPOL; sPARP 1; sPARP1; PARP1_HUMAN.
Research Area	Tumour Cardiovascular Cell biology Signal transduction Apoptosis The new supersedes the old Mitochondrion
Immunogen Species	Mouse
Clonality	Monoclonal
Clone NO.	4B1
React Species	Human
Applications	IHC-P=1:200-800,IHC-F=1:500-1000,IF=1:500-1000（Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Theoretical molecular weight	89/116kDa
Cellular localization	The nucleus cytoplasmic The cell membrane Mitochondrion
Form	Liquid
Concentration	1mg/ml
immunogen	KLH conjugated synthetic peptide derived from human PARP
Lsotype	IgG
Purification	affinity purified by Protein G
Buffer	1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.

Solution

Storage Shipped at 4℃. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.

Attention This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

PubMed PubMed

Product Detail

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.

Subunit:
Component of a base excision repair (BER) complex, containing at least XRCC1, PARP2, POLB and LRIG3. Homo- and heterodimer with PARP2. Interacts with PARP3, APTX and SRY. The SWAP complex consists of NPM1, NCL, PARP1 and SWAP70. Interacts with TIAM2 and ZNF423 (By similarity). Interacts (when poly-ADP-ribosylated) with CHD1L. Interacts with the DNA polymerase alpha catalytic subunit POLA1; this interaction functions as part of the control of replication fork progression. Interacts with EEF1A1, RNF4 and TXK.

Subcellular Location:
Mitochondrion outer membrane; Single-pass membrane protein.
Nucleus membrane; Single-pass membrane protein.
Endoplasmic reticulum membrane; Single-pass membrane protein.
Nucleus.

Post-translational modifications:
Phosphorylated by PRKDC and TXK. Phosphorylated upon DNA damage, probably

by ATM or ATR.
Poly-ADP-ribosylated by PARP2. Poly-ADP-ribosylation mediates the recruitment of CHD1L to DNA damage sites.
S-nitrosylated, leading to inhibit transcription regulation activity.

Similarity:
Contains 1 BRCT domain.
Contains 1 PARP alpha-helical domain.
Contains 1 PARP catalytic domain.
Contains 2 PARP-type zinc fingers.

SWISS:
P09874

Gene ID:
142

Database links:

Entrez Gene: 142 Human

Entrez Gene: 11545 Mouse

Entrez Gene: 25591 Rat

Omim: 173870 Human

SwissProt: P09874 Human

SwissProt: P11103 Mouse

SwissProt: P27008 Rat

Unigene: 177766 Human

Unigene: 277779 Mouse

Unigene: 11327 Rat

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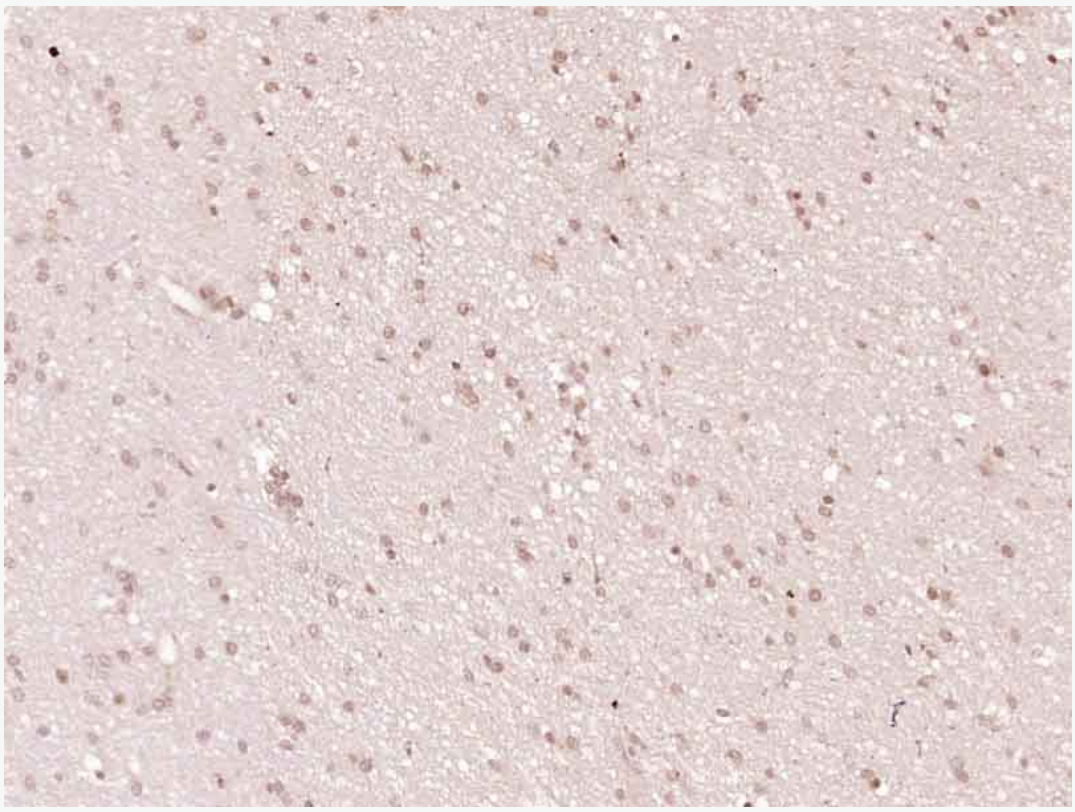
Product Picture



Paraformaldehyde-fixed, paraffin embedded (Human brain glioma); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Cleaved PARP) Monoclonal Antibody, Unconjugated (SLM-33151M 4B1) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Mouse) (sp-0024) instructionsand DAB staining.