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PARP2 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP12345b

Specification

PARP2 Antibody (C-term) - Product Information

Application	**WB,E**
Primary Accession	O88554
Other Accession	NP_033762.1
Reactivity	**Mouse**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Antigen Region	**306-336**

PARP2 Antibody (C-term) - Additional Information

Gene ID 11546

Other Names
Poly [ADP-ribose] polymerase 2, PARP-2, mPARP-2, ADP-ribosyltransferase diphtheria toxin-like 2, ARTD2, NAD(+) ADP-ribosyltransferase 2, ADPRT-2, Poly[ADP-ribose] synthase 2, pADPRT-2, Parp2, Adprt2, Adprtl2, Aspartl2

Target/Specificity
This PARP2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 306-336 amino acids from the C-terminal region of human PARP2.

Dilution
WB~~1:1000

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
PARP2 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

PARP2 Antibody (C-term) - Protein Information

Name Parp2

Synonyms Adprt2, Adprtl2, Aspartl2

Function Poly-ADP-ribosyltransferase that mediates poly-ADP- ribosylation of proteins and plays a key role in DNA repair (PubMed:10364231, PubMed:12065591). Mediates glutamate, aspartate or serine ADP-ribosylation of proteins: the ADP-D-ribosyl group of NAD(+) is transferred to the acceptor carboxyl group of target residues and further ADP-ribosyl groups are transferred to the 2'-position of the terminal adenosine moiety, building up a polymer with an average chain length of 20-30 units (PubMed:12065591). Serine ADP-ribosylation of proteins constitutes the primary form of ADP-ribosylation of proteins in response to DNA damage (By similarity). Mediates glutamate and aspartate ADP-ribosylation of target proteins in absence of HPF1 (By similarity). Following interaction with HPF1, catalyzes serine ADP- ribosylation of target proteins; HPF1 conferring serine specificity by completing the PARP2 active site (By similarity). PARP2 initiates the repair of double-strand DNA breaks: recognizes and binds DNA breaks within chromatin and recruits HPF1, licensing serine ADP-ribosylation of target proteins, such as histones, thereby promoting decompaction of chromatin and the recruitment of repair factors leading to the reparation of DNA strand breaks (By similarity). HPF1 initiates serine ADP-ribosylation but restricts the polymerase activity of PARP2 in order to limit the length of poly-ADP-ribose chains (By similarity). Specifically mediates formation of branched poly-ADP-ribosylation (By similarity). Branched poly-ADP-ribose chains are specifically recognized by some factors, such as APLF (By similarity). In addition to proteins, also able to ADP-ribosylate DNA: preferentially acts on 5'-terminal phosphates at DNA strand breaks termini in nicked duplex (By similarity).

Cellular Location
Nucleus. Chromosome {ECO:0000250|UniProtKB:Q9UGN5}. Note=Recruited to DNA damage sites in a PARP1-dependent process: recognizes and binds poly-ADP-ribose chains produced by PARP1 at DNA damage sites via its N-terminus, leading to its recruitment. {ECO:0000250|UniProtKB:Q9UGN5}

Tissue Location
Widely expressed; the highest levels were in testis followed by ovary (PubMed:11133988). Expression is correlated with proliferation, with higher levels occurring during early fetal development and organogenesis and in the highly proliferative cell compartments of adult (PubMed:11948190).

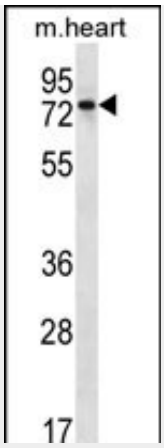
PARP2 Antibody (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

PARP2 Antibody (C-term) - Images

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PARP2 Antibody (C-term) (Cat. #AP12345b) western blot analysis in mouse heart tissue lysates (35ug/lane).This demonstrates the PARP2 antibody detected the PARP2 protein (arrow).

PARP2 Antibody (C-term) - Background

Parp2 is 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.

PARP2 Antibody (C-term) - References

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