

**ADPRHL2 Antibody (N-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP9723a**

**Specification**

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**ADPRHL2 Antibody (N-term) - Product Information**

Application	<b>WB, FC,E</b>
Primary Accession	<a href="#">O9NX46</a>
Reactivity	<b>Human</b>
Host	<b>Rabbit</b>
Clonality	<b>Polyclonal</b>
Isotype	<b>Rabbit IgG</b>
Antigen Region	<b>87-114</b>

**ADPRHL2 Antibody (N-term) - Additional Information**

**Gene ID** 54936

**Other Names**

Poly(ADP-ribose) glycohydrolase ARH3, ADP-ribosylhydrolase 3, [Protein ADP-ribosylarginine] hydrolase-like protein 2, ADPRHL2, ARH3

**Target/Specificity**

This ADPRHL2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 87-114 amino acids from the N-terminal region of human ADPRHL2.

**Dilution**

WB~~1:1000  
FC~~1:10~50

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**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**

ADPRHL2 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**ADPRHL2 Antibody (N-term) - Protein Information**

**Name** ADPRS ([HGNC:21304](#))

**Function** ADP-ribosylhydrolase that preferentially hydrolyzes the scissile alpha-O-linkage attached to the anomeric C1" position of ADP- ribose and acts on different substrates, such as proteins ADP-

ribosylated on serine and threonine, free poly(ADP-ribose) and O-acetyl-ADP-D-ribose (PubMed:[21498885](#), PubMed:[29907568](#), PubMed:[30045870](#), PubMed:[30401461](#), PubMed:[30830864](#), PubMed:[33186521](#), PubMed:[33769608](#), PubMed:[33894202](#), PubMed:[34019811](#), PubMed:[34321462](#), PubMed:[34479984](#), PubMed:[34625544](#)). Specifically acts as a serine mono-ADP-ribose hydrolase by mediating the removal of mono-ADP-ribose attached to serine residues on proteins, thereby playing a key role in DNA damage response (PubMed:[28650317](#), PubMed:[29234005](#), PubMed:[30045870](#), PubMed:[33186521](#), PubMed:[34019811](#), PubMed:[34625544](#)). Serine ADP-riboseylation of proteins constitutes the primary form of ADP-riboseylation of proteins in response to DNA damage (PubMed:[29480802](#), PubMed:[33186521](#), PubMed:[34625544](#)). Does not hydrolyze ADP-ribose-arginine, -cysteine, -diphthamide, or -asparagine bonds (PubMed:[16278211](#), PubMed:[33769608](#)). Also able to degrade protein free poly(ADP-ribose), which is synthesized in response to DNA damage; free poly(ADP-ribose) acts as a potent cell death signal and its degradation by ADPRHL2 protects cells from poly(ADP-ribose)-dependent cell death, a process named parthanatos (PubMed:[16278211](#)). Also hydrolyzes free poly(ADP-ribose) in mitochondria (PubMed:[22433848](#)). Specifically digests O-acetyl-ADP-D-ribose, a product of deacetylation reactions catalyzed by sirtuins (PubMed:[17075046](#), PubMed:[21498885](#)). Specifically degrades 1''-O-acetyl-ADP-D-ribose isomer, rather than 2''-O-acetyl-ADP-D-ribose or 3''-O-acetyl-ADP-D-ribose isomers (PubMed:[21498885](#)).

#### Cellular Location

Nucleus. Cytoplasm. Chromosome Mitochondrion matrix Note=Recruited to DNA lesion regions following DNA damage; ADP-D-ribose-recognition is required for recruitment to DNA damage sites

#### Tissue Location

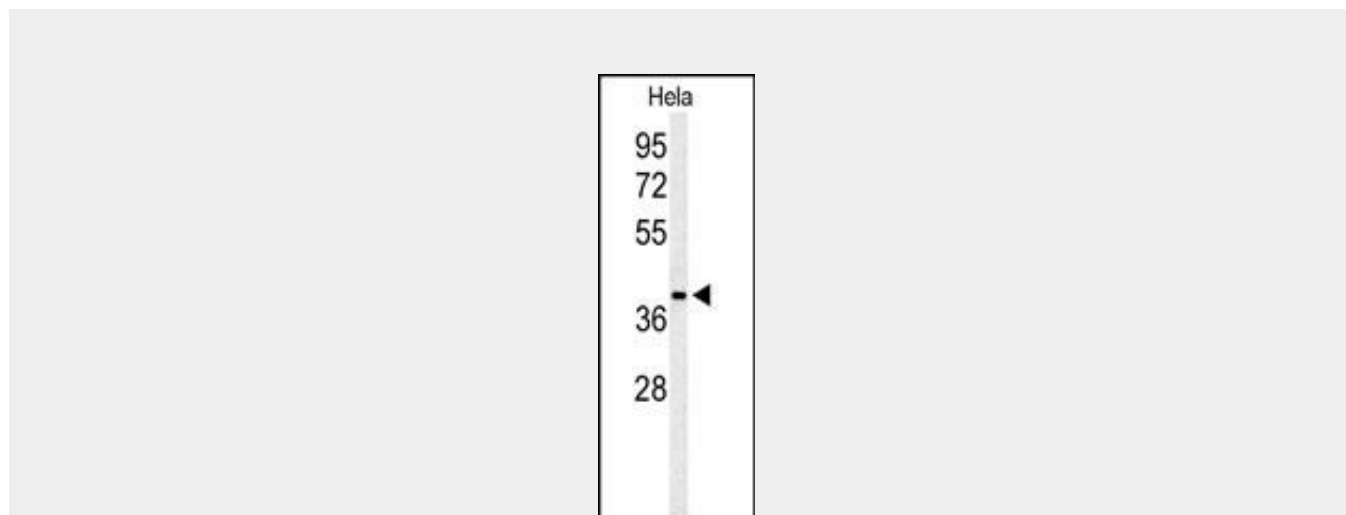
Ubiquitous (PubMed:[16278211](#)). Expressed in skin fibroblasts (PubMed:[30830864](#)).

#### ADPRHL2 Antibody (N-term) - Protocols

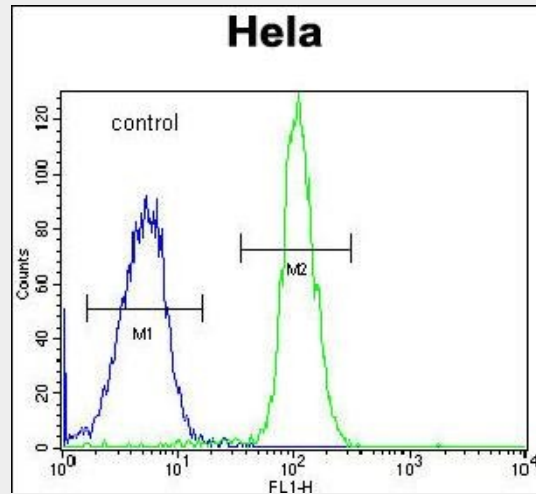
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### ADPRHL2 Antibody (N-term) - Images



Western blot analysis of ADPRHL2 Antibody (N-term) (Cat. #AP9723a) in HeLa cell line lysates (35ug/lane). ADPRHL2 (arrow) was detected using the purified Pab.



ADPRHL2 Antibody (N-term) (Cat. #AP9723a) flow cytometric analysis of HeLa cells (right histogram) compared to a negative control cell (left histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

#### **ADPRHL2 Antibody (N-term) - Background**

ADPRHL2 is a member of the ADP-ribosylglycohydrolase family. The enzyme catalyzes the removal of ADP-ribose from ADP-ribosylated proteins. This enzyme localizes to the mitochondria, in addition to the nucleus and cytoplasm.

#### **ADPRHL2 Antibody (N-term) - References**

- Niere, M., et al. Mol. Cell. Biol. 28(2):814-824(2008)
- Ono, T., et al. Proc. Natl. Acad. Sci. U.S.A. 103(45):16687-16691(2006)
- Mueller-Dieckmann, C., et al. Proc. Natl. Acad. Sci. U.S.A. 103(41):15026-15031(2006)