

### Parp9 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP11667b

## **Specification**

### Parp9 Antibody (C-term) - Product Information

**Application** WB, IHC-P,E **Primary Accession 08CAS9** Other Accession NP 084529.1 Human, Mouse Reactivity Host **Rabbit** Clonality **Polyclonal** Isotype Rabbit IgG **Antigen Region** 599-629

## Parp9 Antibody (C-term) - Additional Information

#### **Gene ID 80285**

### **Other Names**

Poly [ADP-ribose] polymerase 9, PARP-9, ADP-ribosyltransferase diphtheria toxin-like 9, ARTD9, B aggressive lymphoma protein homolog, Parp9, Bal

#### Target/Specificity

This Parp9 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 599-629 amino acidsof mouse Parp9.

## **Dilution**

WB~~1:1000 IHC-P~~1:50~100

 $E\sim\sim$ Use at an assay dependent concentration.

#### 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**

Parp9 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

## Parp9 Antibody (C-term) - Protein Information

### Name Parp9



### **Synonyms** Bal

Function ADP-ribosyltransferase which, in association with E3 ligase DTX3L, plays a role in DNA damage repair and in immune responses including interferon-mediated antiviral defenses (PubMed: 27796300). Within the complex, enhances DTX3L E3 ligase activity which is further enhanced by PARP9 binding to poly(ADP-ribose) (By similarity). In addition, positively regulates DTXL3 protein levels (By similarity). In association with DTX3L and in presence of E1 and E2 enzymes, mediates NAD(+)-dependent mono-ADP-ribosylation of ubiquitin which prevents ubiquitin conjugation to substrates such as histones (By similarity). During DNA repair, PARP1 recruits PARP9/BAL1-DTX3L complex to DNA damage sites via PARP9 binding to ribosylated PARP1 (By similarity). Subsequent PARP1-dependent PARP9/BAL1-DTX3L-mediated ubiquitination promotes the rapid and specific recruitment of 53BP1/TP53BP1, UIMC1/RAP80, and BRCA1 to DNA damage sites (By similarity). In response to DNA damage, PARP9-DTX3L complex is required for efficient non- homologous end joining (NHEI) but the complex function is restrained by PARP9 activity (By similarity). Dispensable for B-cell receptor (BCR) assembly through V(D)| recombination and class switch recombination (CSR) (PubMed: 28105679). In macrophages, positively regulates pro- inflammatory cytokines production in response to IFNG stimulation by suppressing PARP14-mediated STAT1 ADP-ribosylation and thus promoting STAT1 phosphorylation (PubMed: 27796300). Also suppresses PARP14- mediated STAT6 ADP-ribosylation (By similarity).

#### **Cellular Location**

Cytoplasm, cytosol {ECO:0000250|UniProtKB:Q8IXQ6}. Nucleus {ECO:0000250|UniProtKB:Q8IXQ6} Note=Shuttles between the nucleus and the cytosol. Translocates to the nucleus in response to IFNG or IFNB1 stimulation. Export to the cytosol depends on the interaction with DTX3L. Localizes at sites of DNA damage in a PARP1-dependent manner. {ECO:0000250|UniProtKB:Q8IXQ6}

#### **Tissue Location**

Highly expressed in the thymus and intestine (PubMed:18069692). Expressed in macrophages (PubMed:27796300)

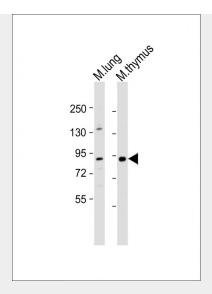
#### Parp9 Antibody (C-term) - Protocols

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

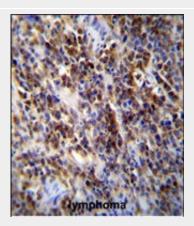
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## Parp9 Antibody (C-term) - Images





All lanes: Anti-Parp9 Antibody (C-term) at 1:1000 dilution Lane 1: mouse lung lysate Lane 2: mouse thymus lysate Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size: 97 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Parp9 Antibody (C-term) (Cat. #AP11667b)immunohistochemistry analysis in formalin fixed and paraffin embedded human lymphoma followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of Parp9 Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.

## Parp9 Antibody (C-term) - Background

PARP9 is a novel risk related gene that is expressed at higher levels in fatal high risk diffuse large B cell lymphomas.

# Parp9 Antibody (C-term) - References

Hakme, A., et al. Dev. Dyn. 237(1):209-215(2008)