

# Parp9 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP11667b

# **Product Information**

Application	WB, IHC-P, E
Primary Accession	<u>Q8CAS9</u>
Other Accession	<u>NP_084529.1</u>
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB14182
Calculated MW	96659
Antigen Region	599-629

# **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~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. 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	Parp9 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

## **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 (NHEJ) but the complex function is restrained by PARP9 activity (By similarity). Dispensable for B-cell receptor (BCR) assembly through V(D)J 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)

## Background

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

### References

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

### Images



All lanes : Anti-Parp9 Antibody (C-term) at 1:1000 dilution + PC-3 cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 100 kDa Blocking/Dilution buffer: 5% NFDM/TBST. Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.