

# Mouse Parp9 Antibody (N-term) Blocking peptide

Synthetic peptide Catalog # BP12195a

### **Specification**

## Mouse Parp9 Antibody (N-term) Blocking peptide - Product Information

**Primary Accession** 

**08CAS9** 

# Mouse Parp9 Antibody (N-term) Blocking peptide - 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

#### **Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

### **Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

#### **Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

## Mouse Parp9 Antibody (N-term) Blocking peptide - 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:<a href="http://www.uniprot.org/citations/27796300" target="\_blank">27796300</a>). 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:<a href="http://www.uniprot.org/citations/28105679"





target=" blank">28105679</a>). 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:<a href="http://www.uniprot.org/citations/27796300" target=" blank">27796300</a>). 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)

### Mouse Parp9 Antibody (N-term) Blocking peptide - Protocols

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

### • Blocking Peptides

Mouse Parp9 Antibody (N-term) Blocking peptide - Images

Mouse Parp9 Antibody (N-term) Blocking peptide - Background

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

Mouse Parp9 Antibody (N-term) Blocking peptide - References

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