

# PRP19 Rabbit mAb [pUEL]

Cat NO. :A86450

#### Information:

Applications	Reactivity:	UniProt ID:	MW(kDa)	Host	Isotype	Size
WB IHC ICC/IF FC	Human,Mouse,R	Q9UMS4	55kDa	Rabbit	IgG	50ul,100ul,200ul
	at					

Applications detail:

ApplicationDilutionWB1:1000-2000IHC1:100ICC/IF1:100The optimal dilutions should be determined by the end user

Conjugate:

UnConjugate

Form:

Liquid

sensitivity:

Endogenous

**Purification**:

Affinity-chromatography

# Specificity:

Antibody is produced by immunizing animals with A synthesized peptide derived from human PRP19

# Storage buffer and conditions:

Antibody store in 10 mM PBS, 0.5mg/ml BSA, 50% glycerol (buffer) .

Shipped at 4°C. Store at-20°C or -80°C.

Products are valid for one natural year of receipt. Avoid repeated freeze / thaw cycles.

### Tissue specificity:

Ubiquitous. Weakly expressed in senescent cells of different tissue origins. Highly expressed in tumor cell lines..

## Subcellular location:

Nucleus. Nucleus, nucleoplasm. Cytoplasm, cytoskeleton, spindle. Cytoplasm. Lipid droplet.

## Function:

Introduction: WB: Western Blot IP: Immunoprecipitation IHC: Immunohistochemistry ChIP: Chromatin Immunoprecipitation ICC/IF: Immunocytochemistry/
Immunofluorescence F: Flow Cytometry

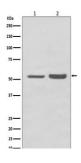
Cross Reactivity: H: human M: mouse R: rat Hm: hamster Mk: monkey Vir: virus Mi: mink C: chicken Dm D. melanogaster X: Xenopus Z: zebrafish B: bovine Dg: dog Pg: pig Hr: horse



Ubiquitin-protein ligase which is a core component of several complexes mainly involved pre-mRNA splicing and DNA repair. Required for pre-mRNA splicing as component of the spliceosome (PubMed:28502770, PubMed:28076346, PubMed:29360106, PubMed:29301961, PubMed:30705154). Core component of the PRP19C/Prp19 complex/NTC/Nineteen complex which is part of the spliceosome and participates in its assembly, its remodeling and is required for its activity. During assembly of the spliceosome, mediates 'Lys-63'-linked polyubiquitination of the U4 spliceosomal protein PRPF3. Ubiquitination of PRPF3 allows its recognition by the U5 component PRPF8 and stabilizes the U4/U5/U6 tri-snRNP spliceosomal complex (PubMed:20595234). Recruited to RNA polymerase II C-terminal domain (CTD) and the pre-mRNA, it may also couple the transcriptional and spliceosomal machineries (PubMed:21536736). The XAB2 complex, which contains PRPF19, is also involved in pre-mRNA splicing, transcription and transcription-coupled repair (PubMed: 17981804). Beside its role in premRNA splicing PRPF19, as part of the PRP19-CDC5L complex, plays a role in the DNA damage response/DDR. It is recruited to the sites of DNA damage by the RPA complex where PRPF19 directly ubiquitinates RPA1 and RPA2. 'Lys-63'-linked polyubiquitination of the RPA complex allows the recruitment of the ATR-ATRIP complex and the activation of ATR, a master regulator of the DNA damage response (PubMed:24332808). May also play a role in DNA double-strand break (DSB) repair by recruiting the repair factor SETMAR to altered DNA (PubMed:18263876). As part of the PSO4 complex may also be involved in the DNA interstrand cross-links/ICLs repair process (PubMed:16223718). In addition, may also mediate 'Lys-48'-linked polyubiquitination of substrates and play a role in proteasomal degradation (PubMed:11435423). May play a role in the biogenesis of lipid droplets (By similarity). May play a role in neural differentiation possibly through its function as part of the spliceosome (By similarity)..

### **Validation Data:**

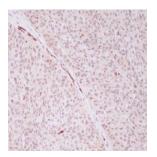
#### PRP19 Rabbit mAb [pUEL] Images



Western blot (SDS PAGE) analysis of extracts from (1) HepG2 cell lysate; (2) NIH/3T3 cell lysate. Using PRP19 Rabbit mAb [pUEL]at dilution of 1:1000 incubated at  $4^{\circ}\mathrm{C}$  over night.

View more information on http://naturebios.com





Immunohistochemical analysis of paraffin-embedded human cervix cancer, .Using PRP19 Rabbit mAb [pUEL] at dilution of 1:100 incubated at 4 °C over night.Perform heat mediated antigen retrieval before commencing with IHC staining protocol.