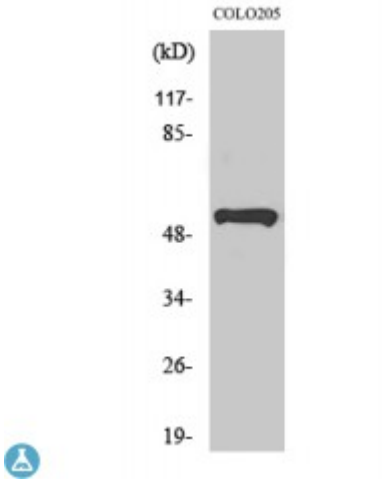
Anti-PRP19 antibody



Description	Rabbit polyclonal to PRP19.

Model	STJ95229
Host	Rabbit
Reactivity	Human, Mouse, Rat
Applications	ELISA, IHC, WB
Immunogen	Synthesized peptide derived from human PRP19
Immunogen Region	140-220 aa, Internal
Gene ID	27339
Gene Symbol	PRPF19
Dilution range	WB 1:500-1:2000IHC 1:100-1:300ELISA 1:40000
Specificity	PRP19 Polyclonal Antibody detects endogenous levels of PRP19 protein.
Tissue Specificity	Ubiquitous. Weakly expressed in senescent cells of different tissue origins. Highly expressed in tumor cell lines.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Note	For Research Use Only (RUO).
Protein Name	Pre-mRNA-processing factor 19 Nuclear matrix protein 200 PRP19/PSO4 homolog hPso4 RING-type E3 ubiquitin transferase PRP19 Senescence evasion factor
Molecular Weight	50 kDa

Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:17896OMIM:608330
Alternative Names	Pre-mRNA-processing factor 19 Nuclear matrix protein 200 PRP19/PSO4 homolog hPso4 RING-type E3 ubiquitin transferase PRP19 Senescence evasion factor
Function	Ubiquitin-protein ligase which is a core component of several complexes mainly involved pre-mRNA splicing and DNA repair. 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 . Recruited to RNA polymerase II C-terminal domain (CTD) and the pre-mRNA, it may also couple the transcriptional and spliceosomal machineries . The XAB2 complex, which contains PRPF19, is also involved in pre-mRNA splicing, transcription and transcription-coupled repair . Beside its role in pre-mRNA 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 . May also play a role in DNA double-strand break (DSB) repair by recruiting the repair factor SETMAR to altered DNA . As part of the PSO4 complex may also be involved in the DNA interstrand cross-links/ICLs repair process . In addition, may also mediate 'Lys-48'-linked polyubiquitination of substrates and play a role in proteasomal degradation . May play a role in the biogenesis of lipid droplets . May play a role in neural differentiation possibly through its function as part of the spliceosome .
Sequence and Domain Family	The 7 WD repeats are necessary and sufficient to support interaction with the RPA complex.
Cellular Localization	Nucleus Nucleus, nucleoplasm Cytoplasm, cytoskeleton, spindle Cytoplasm Lipid droplet. Nucleoplasmic in interphase cells. Irregularly distributed in anaphase cells. In prophase cells, uniformly distributed, but not associated with condensing chromosomes. Found in extrachromosomal regions in metaphase cells. Mainly localized to the mitotic spindle apparatus when chromosomes segregate during anaphase. When nuclei reform during late telophase, uniformly distributed in daughter cells and displays no preferred association with decondensing chromatin. Recruited on damaged DNA at sites of double-strand break.

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