

**PRP4 Antibody (C-term)**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP7551B****Specification**

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**PRP4 Antibody (C-term) - Product Information**

Application	WB, IHC-P,E
Primary Accession	<a href="#">Q13523</a>
Other Accession	<a href="#">Q5RKH1</a> , <a href="#">Q61136</a> , <a href="#">Q08DZ2</a>
Reactivity	Human
Predicted	Bovine, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	116987
Antigen Region	948-978

**PRP4 Antibody (C-term) - Additional Information****Gene ID** 8899**Other Names**

Serine/threonine-protein kinase PRP4 homolog, PRP4 kinase, PRP4 pre-mRNA-processing factor 4 homolog, PRPF4B, KIAA0536, PRP4, PRP4H, PRP4K

**Target/Specificity**

This PRP4 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 948-978 amino acids from the C-terminal region of human PRP4.

**Dilution**

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

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. 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**

PRP4 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**PRP4 Antibody (C-term) - Protein Information****Name** PRP4K ([HGNC:17346](#))

**Function** Serine/threonine kinase involved in spliceosomal assembly as well as mitosis and signaling regulation (PubMed:[10799319](#), PubMed:[12077342](#), PubMed:[17513757](#), PubMed:[17998396](#)). Connects chromatin mediated regulation of transcription and pre-mRNA splicing (PubMed:[12077342](#)). During spliceosomal assembly, interacts with and phosphorylates PRPF6 and PRPF31, components of the U4/U6-U5 tri-small nuclear ribonucleoprotein (snRNP), to facilitate the formation of the spliceosome B complex. Plays a role in regulating transcription and the spindle assembly checkpoint (SAC) (PubMed:[20118938](#)). Associates with U5 snRNP and NCOR1 deacetylase complexes which may allow a coordination of pre-mRNA splicing with chromatin remodeling events involved in transcriptional regulation (PubMed:[12077342](#)). Associates and probably phosphorylates SMARCA4 and NCOR1 (PubMed:[12077342](#)). Phosphorylates SRSF1 (PubMed:[11418604](#)). Associates with kinetochores during mitosis and is necessary for recruitment and maintenance of the checkpoint proteins such as MAD1L1 and MAD12L1 at the kinetochores (PubMed:[17998396](#)). Phosphorylates and regulates the activity of the transcription factors such as ELK1 and KLF13 (PubMed:[10799319](#), PubMed:[17513757](#)). Phosphorylates nuclear YAP1 and WWTR1/TAZ which induces nuclear exclusion and regulates Hippo signaling pathway, involved in tissue growth control (PubMed:[29695716](#)).

#### Cellular Location

Nucleus. Chromosome, centromere, kinetochore Note=Located throughout the nucleus, excluding the nucleolus but enriched in multiple speckles.

#### Tissue Location

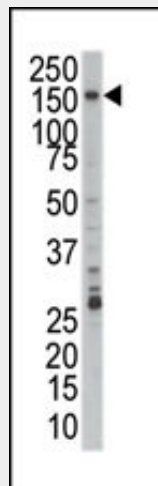
Ubiquitous.

#### PRP4 Antibody (C-term) - Protocols

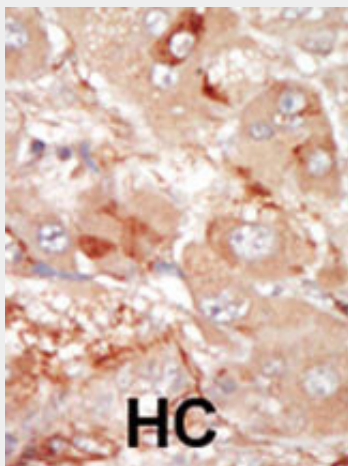
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### PRP4 Antibody (C-term) - Images



Western blot analysis of anti-PRP4 Pab (Cat. #AP7551b) in Jurkat cell lysate. PRP4 (arrow) was detected using purified Pab. Secondary HRP-anti-rabbit was used for signal visualization with chemiluminescence.



Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.

#### **PRP4 Antibody (C-term) - Background**

Pre-mRNA splicing occurs in two sequential transesterification steps, and PRP4 is thought to be involved in pre-mRNA splicing and in signal transduction. This protein belongs to a kinase family that includes serine/arginine-rich protein-specific kinases and cyclin-dependent kinases (CDKs). This protein is regarded as a CDK-like kinase (Clk) with homology to mitogen-activated protein kinases (MAPKs).

#### **PRP4 Antibody (C-term) - References**

- Dellaire, G., et al., Mol. Cell. Biol. 22(14):5141-5156 (2002).
- Kojima, T., et al., J. Biol. Chem. 276(34):32247-32256 (2001).
- Huang, Y., et al., Biochem. Biophys. Res. Commun. 271(2):456-463 (2000).
- Gross, T., et al., Nucleic Acids Res. 25(5):1028-1035 (1997).