

**WEE1 Antibody (Center)**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AW5256**

**Specification**

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**WEE1 Antibody (Center) - Product Information**

Application	WB,E
Primary Accession	<a href="#">P30291</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	H=72 KDa
Isotype	Rabbit IgG
Antigen Source	HUMAN

**WEE1 Antibody (Center) - Additional Information**

**Gene ID** 7465

**Antigen Region**  
144-173

**Other Names**  
WEE1; Wee1-like protein kinase; Wee1A kinase

**Dilution**  
WB~~ 1:1000

**Target/Specificity**  
This WEE1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 144-173 amino acids from the Central region of human WEE1.

**Format**  
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**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**  
WEE1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

**WEE1 Antibody (Center) - Protein Information**

**Name** WEE1 {ECO:0000303|PubMed:8348613, ECO:0000312|HGNC:HGNC:12761}

### Function

Acts as a negative regulator of entry into mitosis (G2 to M transition) by protecting the nucleus from cytoplasmically activated cyclin B1-complexed CDK1 before the onset of mitosis by mediating phosphorylation of CDK1 on 'Tyr-15' (PubMed:<a href="http://www.uniprot.org/citations/15070733" target="\_blank">15070733</a>, PubMed:<a href="http://www.uniprot.org/citations/7743995" target="\_blank">7743995</a>, PubMed:<a href="http://www.uniprot.org/citations/8348613" target="\_blank">8348613</a>, PubMed:<a href="http://www.uniprot.org/citations/8428596" target="\_blank">8428596</a>). Specifically phosphorylates and inactivates cyclin B1-complexed CDK1 reaching a maximum during G2 phase and a minimum as cells enter M phase (PubMed:<a href="http://www.uniprot.org/citations/7743995" target="\_blank">7743995</a>, PubMed:<a href="http://www.uniprot.org/citations/8348613" target="\_blank">8348613</a>, PubMed:<a href="http://www.uniprot.org/citations/8428596" target="\_blank">8428596</a>). Phosphorylation of cyclin B1-CDK1 occurs exclusively on 'Tyr-15' and phosphorylation of monomeric CDK1 does not occur (PubMed:<a href="http://www.uniprot.org/citations/7743995" target="\_blank">7743995</a>, PubMed:<a href="http://www.uniprot.org/citations/8348613" target="\_blank">8348613</a>, PubMed:<a href="http://www.uniprot.org/citations/8428596" target="\_blank">8428596</a>). Its activity increases during S and G2 phases and decreases at M phase when it is hyperphosphorylated (PubMed:<a href="http://www.uniprot.org/citations/7743995" target="\_blank">7743995</a>). A correlated decrease in protein level occurs at M/G1 phase, probably due to its degradation (PubMed:<a href="http://www.uniprot.org/citations/7743995" target="\_blank">7743995</a>).

### Cellular Location

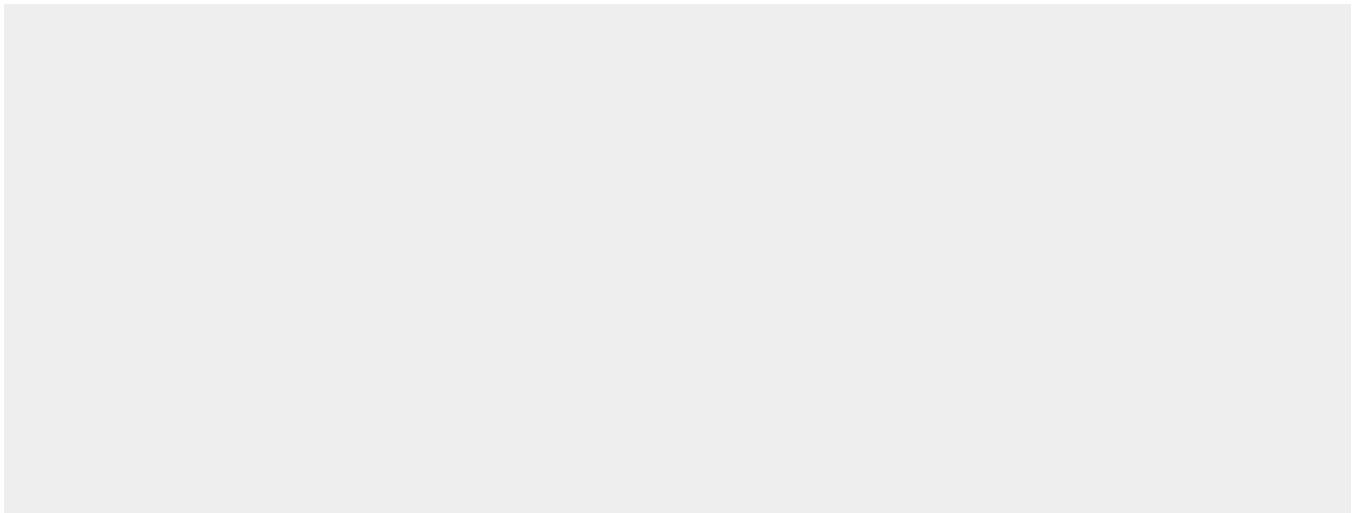
Nucleus.

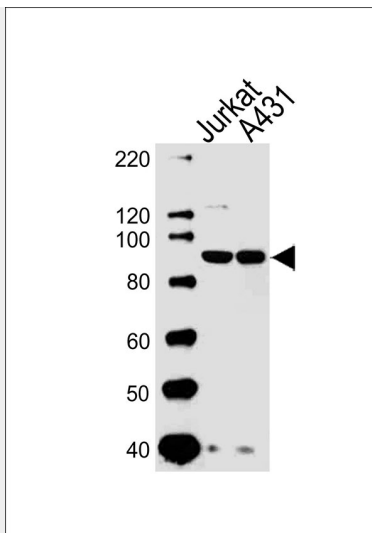
### WEE1 Antibody (Center) - Protocols

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](#)

### WEE1 Antibody (Center) - Images





Western blot analysis of lysates from Jurkat,A431 cell line (from left to right), using WEE1 Antibody (A159)(Cat. #AW5256). AW5256 was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody.

#### **WEE1 Antibody (Center) - Background**

WEE1 is a nuclear protein, which is a tyrosine kinase belonging to the Ser/Thr family of protein kinases. This protein catalyzes the inhibitory tyrosine phosphorylation of CDC2/cyclin B kinase, and appears to coordinate the transition between DNA replication and mitosis by protecting the nucleus from cytoplasmically activated CDC2 kinase.

#### **WEE1 Antibody (Center) - References**

Kawasaki, H., et al., *Oncogene* 22(44):6839-6844 (2003).  
Hashimoto, O., et al., *Mol. Carcinog.* 36(4):171-182 (2003).  
Yuan, H., et al., *J. Virol.* 77(3):2063-2070 (2003).  
Masaki, T., et al., *Hepatology* 37(3):534-543 (2003).  
de Noronha, C.M., et al., *Science* 294(5544):1105-1108 (2001).