

**WEE1 Antibody (Center)**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP8106c**

**Specification**

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

Application	<b>WB, IHC-P,E</b>
Primary Accession	<a href="#">P30291</a>
Reactivity	<b>Human</b>
Host	<b>Rabbit</b>
Clonality	<b>Polyclonal</b>
Isotype	<b>Rabbit IgG</b>
Calculated MW	<b>71597</b>
Antigen Region	<b>144-173</b>

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

**Gene ID** 7465

**Other Names**

Wee1-like protein kinase, WEE1hu, Wee1A kinase, WEE1

**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.

**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**

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:[15070733](#), PubMed:[7743995](#), PubMed:[8348613](#), PubMed:[8428596](#)). Specifically phosphorylates and inactivates cyclin B1-complexed CDK1 reaching a maximum during G2 phase and a minimum as cells enter M phase (PubMed:[7743995](#), PubMed:[8348613](#), PubMed:[8428596](#)). Phosphorylation of cyclin B1-CDK1 occurs exclusively on 'Tyr-15' and phosphorylation of monomeric CDK1 does not occur (PubMed:[7743995](#), PubMed:[8348613](#), PubMed:[8428596](#)). Its activity increases during S and G2 phases and decreases at M phase when it is hyperphosphorylated (PubMed:[7743995](#)). A correlated decrease in protein level occurs at M/G1 phase, probably due to its degradation (PubMed:[7743995](#)).

#### Cellular Location

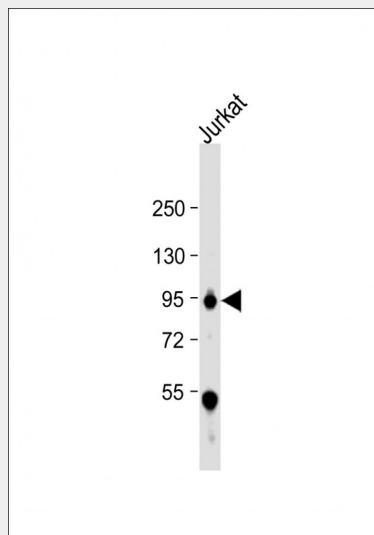
Nucleus.

#### WEE1 Antibody (Center) - Protocols

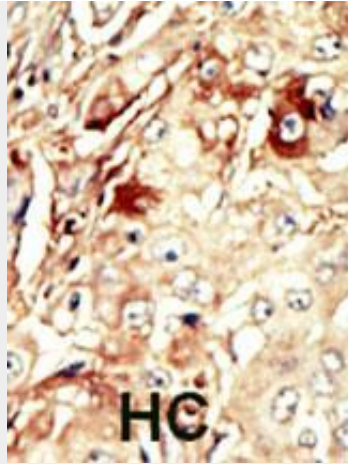
Provided below are standard protocols that you may find useful for product applications.

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

#### WEE1 Antibody (Center) - Images



Anti-WEE1 Antibody (A159) at 1:1000 dilution + Jurkat whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 72 kDa Blocking/Dilution buffer: 5% NFD/MTBST.



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

#### **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).