

# WEE1 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP8106B

## Product Information

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<b>Application</b>	IHC-P, WB, E
<b>Primary Accession</b>	<a href="#">P30291</a>
<b>Other Accession</b>	<a href="#">Q63802</a> , <a href="#">P47810</a>
<b>Reactivity</b>	Human
<b>Predicted</b>	Mouse, Rat
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	Rabbit IgG
<b>Clone Names</b>	RB3525
<b>Calculated MW</b>	71597
<b>Antigen Region</b>	604-634

## Additional Information

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<b>Gene ID</b>	7465
<b>Other Names</b>	Wee1-like protein kinase, WEE1hu, Wee1A kinase, WEE1
<b>Target/Specificity</b>	This WEE1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 604-634 amino acids from the C-terminal region of human WEE1.
<b>Dilution</b>	IHC-P~~1:100~500 WB~~1:1000 E~~Use at an assay dependent concentration.
<b>Format</b>	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.
<b>Storage</b>	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.
<b>Precautions</b>	WEE1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

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<b>Name</b>	WEE1 {ECO:0000303 PubMed:8348613, ECO:0000312 HGNC:HGNC:12761}
<b>Function</b>	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.

## Background

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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.

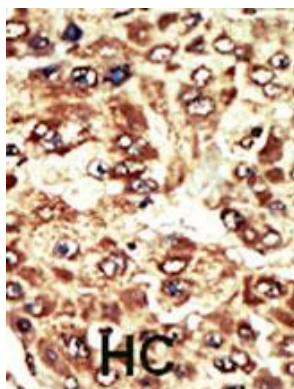
## References

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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).

## Images

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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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.