

**Anti-WEE1 (pS642) Antibody**  
Rabbit polyclonal antibody to WEE1 (pS642)  
Catalog # AP61084

### Specification

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#### Anti-WEE1 (pS642) Antibody - Product Information

Application	WB
Primary Accession	<a href="#">P30291</a>
Other Accession	<a href="#">P47810</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	71597

#### Anti-WEE1 (pS642) Antibody - Additional Information

**Gene ID** 7465

#### Other Names

Wee1-like protein kinase; WEE1hu; Wee1A kinase

#### Target/Specificity

Recognizes endogenous levels of WEE1 (pS642) protein.

#### Dilution

WB~~WB (1/500 - 1/1000)

#### Format

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

#### Storage

Store at -20 °C. Stable for 12 months from date of receipt

#### Anti-WEE1 (pS642) Antibody - 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

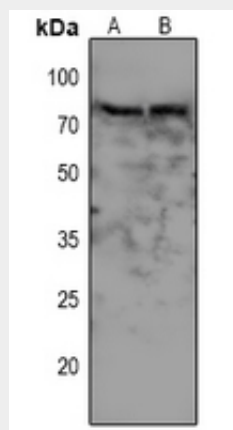
Nucleus.

### Anti-WEE1 (pS642) Antibody - 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](#)

### Anti-WEE1 (pS642) Antibody - Images



Western blot analysis of WEE1 (pS642) expression in mouse brain (A), rat brain (B) whole cell lysates.

### Anti-WEE1 (pS642) Antibody - Background

KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human WEE1. The exact sequence is proprietary.