

**Wee1 (phospho Ser642) Polyclonal Antibody**  
**Catalog # AP67322****Specification****Wee1 (phospho Ser642) Polyclonal Antibody - Product Information**

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

**Wee1 (phospho Ser642) Polyclonal Antibody - Additional Information****Gene ID** 7465**Other Names**

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

**Dilution**

WB~~Western Blot: 1/500 - 1/2000. ELISA: 1/5000. Not yet tested in other applications.

**Format**

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

**Storage Conditions**

-20°C

**Wee1 (phospho Ser642) Polyclonal 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>).

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

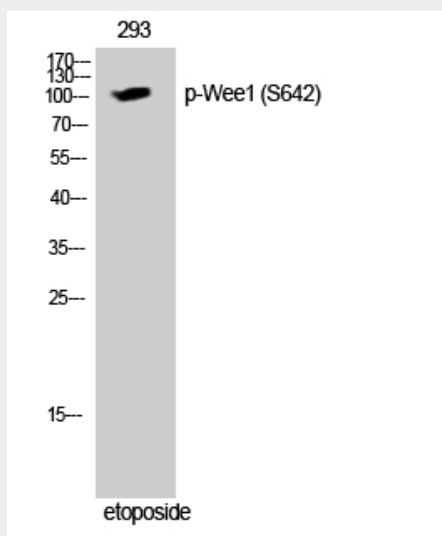
Nucleus.

### Wee1 (phospho Ser642) Polyclonal 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](#)

### Wee1 (phospho Ser642) Polyclonal Antibody - Images



### Wee1 (phospho Ser642) Polyclonal Antibody - Background

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