

# **WEE1 Antibody (Center)**

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP8106c

# **Specification**

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

Application WB, IHC-P,E **Primary Accession** P30291 Reactivity Human Host Rabbit Clonality **Polyclonal** Isotype Rabbit Ig Calculated MW 71597 Antigen Region 144-173

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**

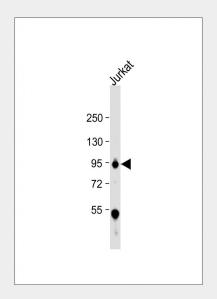
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

### **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.

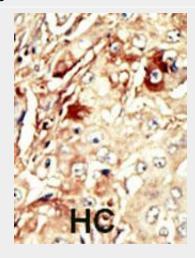
# **Precautions**

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



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% NFDM/TBST.



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



### WEE1 Antibody (Center) - Protein Information

### Name WEE1

#### **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'. 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.

**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 Cytomety
- Cell Culture

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).