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WEE1 Antibody (Center)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AW5256

Specification

WEE1 Antibody (Center) - Product Information

Application	**WB,E**
Primary Accession	P30291
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**H=72 KDa**
Isotype	**Rabbit IgG**
Antigen Source	**HUMAN**

WEE1 Antibody (Center) - Additional Information

Gene ID 7465

Antigen Region
144-173

Other Names
WEE1; Wee1-like protein kinase; Wee1A kinase

Dilution
WB~~ 1:1000

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.

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

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 Cytomety
- Cell Culture

WEE1 Antibody (Center) - Images

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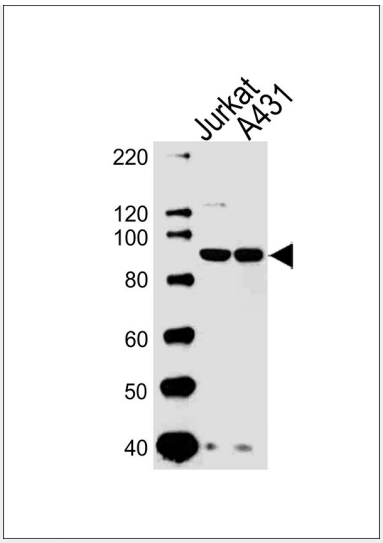

Western blot analysis of lysates from Jurkat,A431 cell line (from left to right), using WEE1 Antibody (A159)(Cat. #AW5256). AW5256 was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody.

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).