

WEE1 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP8106B

Specification

WEE1 Antibody (C-term) - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Isotype Antigen Region WB, IHC-P,E <u>P30291</u> <u>O63802</u>, <u>P47810</u> Human Mouse, Rat Rabbit Polyclonal Rabbit IgG 604-634

WEE1 Antibody (C-term) - 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 604-634 amino acids from the C-terminal 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 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 (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

WEE1 Antibody (C-term) - 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:<u>15070733</u>, PubMed:<u>7743995</u>, PubMed:<u>8348613</u>, PubMed:<u>8428596</u>). Specifically phosphorylates and inactivates cyclin B1-complexed CDK1 reaching a maximum during G2 phase and a minimum as cells enter M phase (PubMed:<u>7743995</u>, PubMed:<u>8348613</u>, PubMed:<u>8428596</u>). Phosphorylation of cyclin B1-CDK1 occurs exclusively on 'Tyr-15' and phosphorylation of monomeric CDK1 does not occur (PubMed:<u>7743995</u>, PubMed:<u>8348613</u>, PubMed:<u>8428596</u>). Its activity increases during S and G2 phases and decreases at M phase when it is hyperphosphorylated (PubMed:<u>7743995</u>). A correlated decrease in protein level occurs at M/G1 phase, probably due to its degradation (PubMed:<u>7743995</u>).

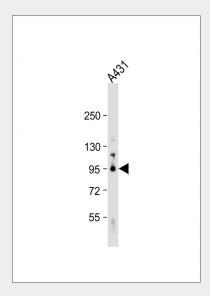
Cellular Location Nucleus.

WEE1 Antibody (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

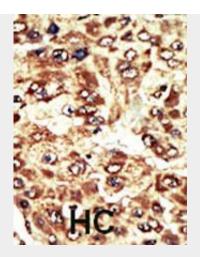
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

WEE1 Antibody (C-term) - Images



Anti-WEE1 Antibody (A619) at 1:1000 dilution + A431 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 immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.

WEE1 Antibody (C-term) - 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 (C-term) - 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).