SunLong Biotech Co.,LTD
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[Primary Antibody]

Rabbit Anti-WEE1 antibody

Catalog Number: SL23526R

FOR RESEARCH USE ONLY

[DATASHEET]

Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Target:	WEE1
Immunogen:	KLH conjugated synthetic peptide derived from human WEE1 : 151-250/646
Purification:	affinity purified by Protein A
Concentration:	1mg/ml
Storage:	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol. Shipped at 4℃. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.
Applications:	WB=1:500-2000 IHC-P=1:100-500 IHC-F=1:100-500 IF=1:100-500 （Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Reactivity:	Human,Rat(predicted:Mouse)
Predicted MW.:	72kDa
Subcellular Location:	The nucleus
Background:	This gene encodes 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. **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

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	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 **Subcellular Location:** Nucleus. **Post-translational modifications:** Phosphorylated during M and G1 phases. Also autophosphorylated. Phosphorylation at Ser-642 by BRSK1 and BRSK2 in post-mitotic neurons, leads to down-regulate WEE1 activity in polarized neurons. Phosphorylated at Ser-53 and Ser-123 by PLK1 and CDK1, respectively, generating an signal for degradation that can be recognized by the SCF(BTRC) complex, leading to its ubiquitination and degradation at the onset of G2/M phase. Ubiquitinated and degraded at the onset of G2/M phase. **Similarity:** Belongs to the protein kinase superfamily. Ser/Thr protein kinase family. WEE1 subfamily. Contains 1 protein kinase domain. **Database links:** **Entrez Gene:** 7465 Human **Entrez Gene:** 22390 Mouse **Entrez Gene:** 308937 Rat Omim: 193525 Human **SwissProt:** P30291 Human **SwissProt:** P47810 Mouse **SwissProt:** Q63802 Rat **Unigene:** 249441 Human **Unigene:** 287173 Mouse **Unigene:** 208255 Rat

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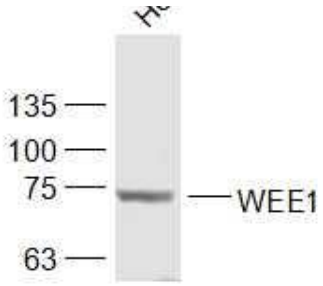
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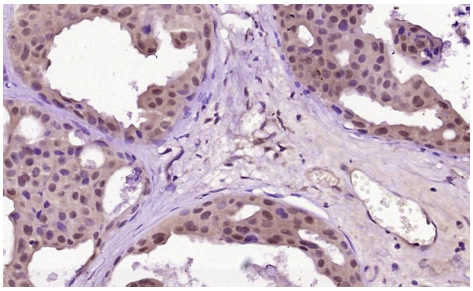
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[VALIDATION IMAGES]





Sample:
Heart (Rat) Lysate at 40 ug
Primary: Anti-WEE1 (SL23526R) at 1/1000 dilution
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution
Predicted band size: 72 kD
Observed band size: 72 kD

Paraformaldehyde-fixed, paraffin embedded (Human breast carcinoma); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (WEE1) Polyclonal Antibody, Unconjugated (SL23526R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.

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