



## Rabbit Anti-Phospho-Wee1 (Ser53) antibody

SL5589R

<b>Product Name:</b>	Phospho-Wee1 (Ser53)
<b>Chinese Name:</b>	磷酸化WEE1蛋白抗体
<b>Alias:</b>	WEE1(phospho S53); WEE1(phospho Ser53); DKFZp686I18166; EC 2.7.10.2; FLJ16446; Wee 1; Wee1 homolog; WEE1 homolog S. pombe; Wee1 like protein kinase; Wee1 tyrosine kinase; Wee1+ homolog; Wee1+ S. pombe homolog; WEE1A; Wee1A kinase; WEE1hu; WEE1 tyrosine kinase isoform 1; MGC105683; WEE1 HUMAN.
<b>Organism Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>React Species:</b>	Human,Mouse,Rat,Chicken,Dog,Pig,Cow,Rabbit,
<b>Applications:</b>	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
<b>Molecular weight:</b>	72kDa
<b>Cellular localization:</b>	The nucleus
<b>Form:</b>	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
<b>immunogen:</b>	KLH conjugated synthesised phosphopeptide derived from human Wee1 around the phosphorylation site of Ser53:ED(p-S)AF
<b>Lsotype:</b>	IgG
<b>Purification:</b>	affinity purified by Protein A
<b>Storage Buffer:</b>	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
<b>Storage:</b>	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
<b>PubMed:</b>	<a href="#">PubMed</a>
<b>Product Detail:</b>	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 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.

**SWISS:**

P30291

**Gene ID:**

7465

**Database links:**

[Entrez Gene: 7465](#)Human

[Entrez Gene: 22390](#)Mouse

[Entrez Gene: 308937](#)Rat

[Oimim: 193525](#)Human

[SwissProt: P30291](#)Human

[SwissProt: P47810](#)Mouse

[SwissProt: Q63802](#)Rat

[Unigene: 249441](#)Human

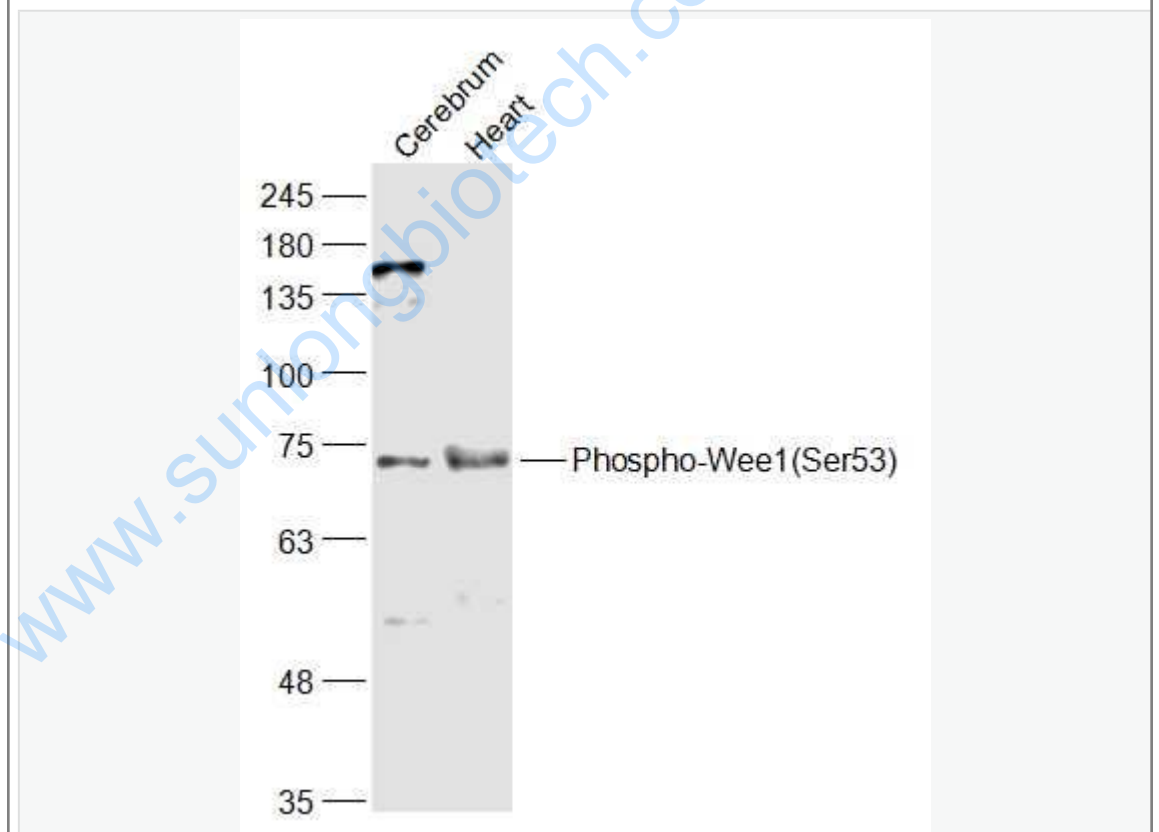
[Unigene: 287173](#)Mouse

[Unigene: 208255](#)Rat

**Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Picture:



Sample:

Cerebrum (Rat) Lysate at 40 ug

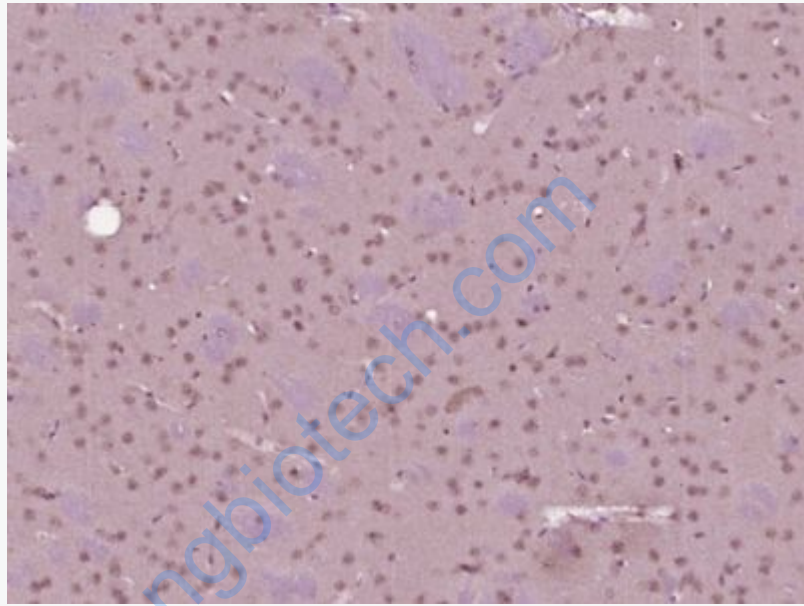
Heart (Rat) Lysate at 40 ug

Primary: Anti-Phospho-Wee1(Ser53) (SL5589R) at 1/1000 dilution

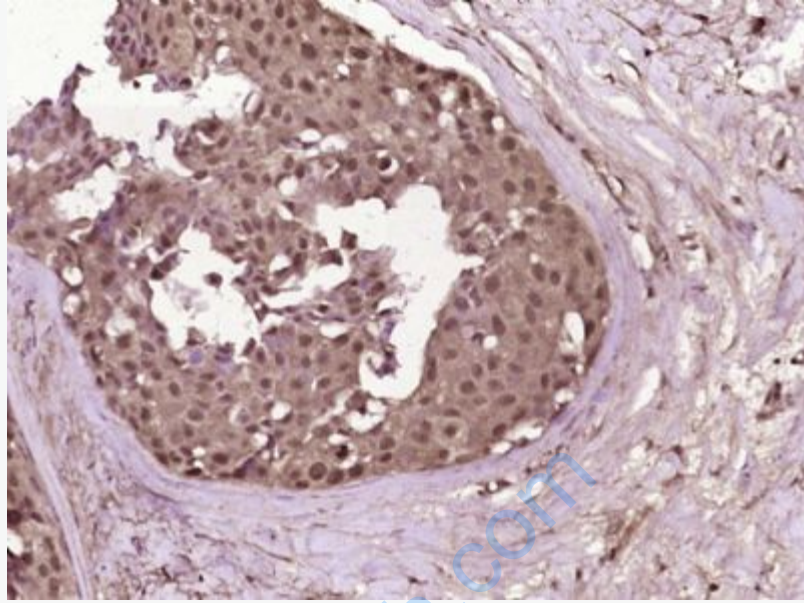
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 72 kD

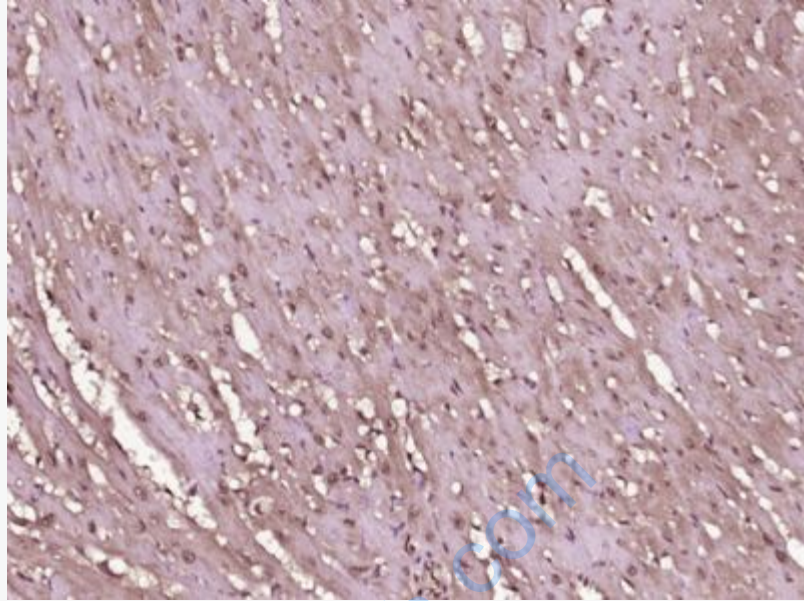
Observed band size: 72 kD



Paraformaldehyde-fixed, paraffin embedded (Mouse brain); 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 (Phospho-Wee1(Ser53)) Polyclonal Antibody, Unconjugated (SL5589R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



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 (Phospho-Wee1(Ser53)) Polyclonal Antibody, Unconjugated (SL5589R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (Rat heart); 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 (Phospho-Wee1(Ser53)) Polyclonal Antibody, Unconjugated (SL5589R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.