



# Wee1 (phospho Ser642) Polyclonal Antibody

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| <b>Catalog No</b>                  | YP-Ab-14384                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Isotype</b>                     | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Reactivity</b>                  | Human;Mouse;Rat                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Applications</b>                | WB;ELISA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Gene Name</b>                   | WEE1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Immunogen</b>                   | The antiserum was produced against synthesized peptide derived from human WEE1 around the phosphorylation site of Ser642. AA range:597-646                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Specificity</b>                 | Phospho-Wee1 (S642) Polyclonal Antibody detects endogenous levels of Wee1 protein only when phosphorylated at S642.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Formulation</b>                 | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Source</b>                      | Polyclonal, Rabbit,IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Purification</b>                | The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Dilution</b>                    | Western Blot: 1/500 - 1/2000. ELISA: 1/5000. Not yet tested in other applications.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Concentration</b>               | 1 mg/ml                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Purity</b>                      | ≥90%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Storage Stability</b>           | -20°C/1 year                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Synonyms</b>                    | DKFZp686l18166;FLJ16446;WEE1;WEE1 homolog (S. pombe);Wee1 like protein kinase;WEE1A;Wee1-like protein kinase;WEE1hu;Wee1A kinase                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Observed Band</b>               | 100kD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Calculated Molecular Weight</b> | 100kD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Cell Pathway</b>                | Nucleus.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Tissue Specificity</b>          | Amygdala,Blood,Epithelium,Human uterus endothel primary cell culture, Placenta,Skin,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Function</b>                    | catalytic activity:ATP + a [protein]-L-tyrosine = ADP + a [protein]-L-tyrosine phosphate.;cofactor:Binds 2 magnesium ions per subunit.;enzyme regulation:Synthesis is increased during S and G2 phases, presumably by an increase in transcription; activity is decreased by phosphorylation during m phase. Protein levels fall in M phase as a result of decreased synthesis combined with degradation. Activity seems to be negatively regulated by phosphorylation upon entry into mitosis, although N-terminal phosphorylation might also regulate the protein stability via protection from proteolysis or might regulate the subcellular location.;function:May act as a negative regulator of entry into mitosis (G2 to M transition) by protecting the nucleus from |



cytoplasmically activated cyclin B1-complexed CDC2 before the onset of mitosis. Its activity increases during S and G2 phases and decreases at M phase

**Background**

WEE1 G2 checkpoint kinase(WEE1) Homo sapiens 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. [provided by RefSeq, Jul 2008],

**matters needing attention**

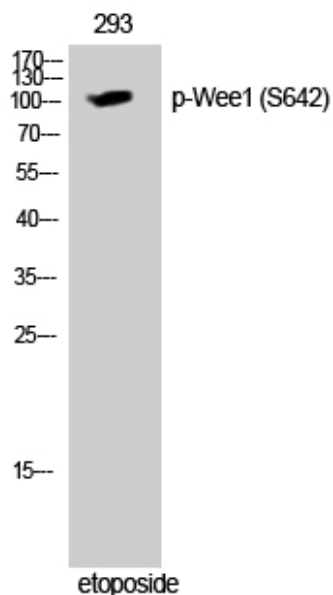
Avoid repeated freezing and thawing!

**Usage suggestions**

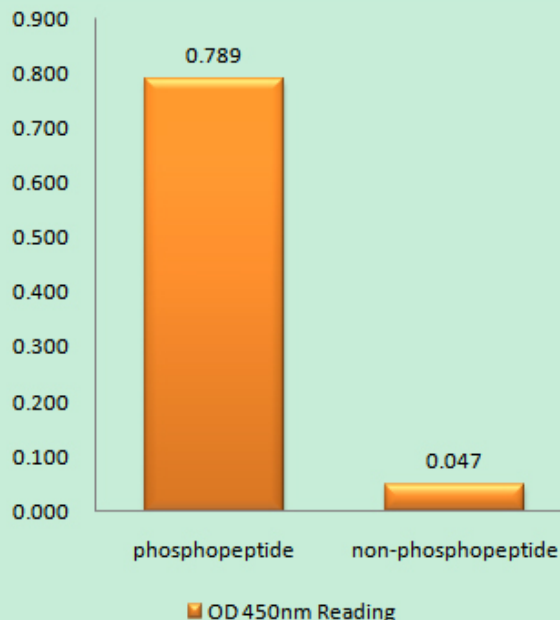
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



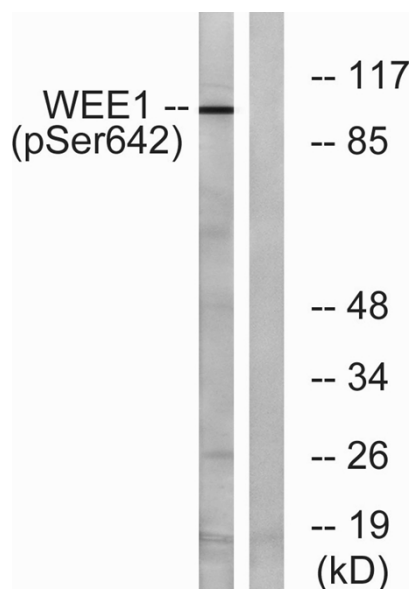
## Products Images



Western Blot analysis of 293 cells using Phospho-Wee1 (S642) Polyclonal Antibody cells nucleus extracted by Minute TM Cytoplasmic and Nuclear Fractionation kit (SC-003, Invent biotech, MN, USA).



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using WEE1 (Phospho-Ser642) Antibody



Western blot analysis of lysates from 293 cells treated with etoposide 25uM 60', using WEE1 (Phospho-Ser642) Antibody. The lane on the right is blocked with the phospho peptide.