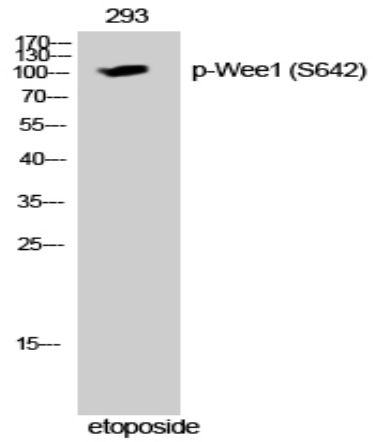
Best Tools for immunology Research

Wee1 (phospho Ser642) Polyclonal Antibody

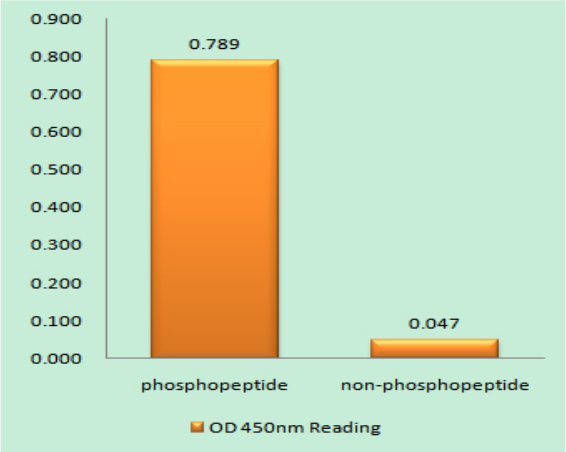
Catalog No :	YP0390
Reactivity :	Human;Mouse;Rat
Applications :	WB;ELISA
Target :	WEE1
Fields :	>>Cell cycle;>>Human immunodeficiency virus 1 infection
Gene Name :	WEE1
Protein Name :	Wee1-like protein kinase
Human Gene Id :	7465
Human Swiss Prot No :	P30291
Mouse Gene Id :	22390
Mouse Swiss Prot No :	P47810
Rat Gene Id :	308937
Rat Swiss Prot No :	Q63802
Immunogen :	The antiserum was produced against synthesized peptide derived from human WEE1 around the phosphorylation site of Ser642. AA range:597-646
Specificity :	Phospho-Wee1 (S642) Polyclonal Antibody detects endogenous levels of Wee1 protein only when phosphorylated at S642.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Polyclonal, Rabbit,IgG
Dilution :	WB 1:500 - 1:2000. ELISA: 1:5000. Not yet tested in other applications.

Purification :	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Concentration :	1 mg/ml
Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)
Observed Band :	100kD
Cell Pathway :	Cell_Cycle_G1S;Cell_Cycle_G2M_DNA;
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],
Function :	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
Subcellular Location :	Nucleus.
Expression :	Amygdala,Blood,Epithelium,Human uterus endothel primary cell culture,Placenta,Skin,

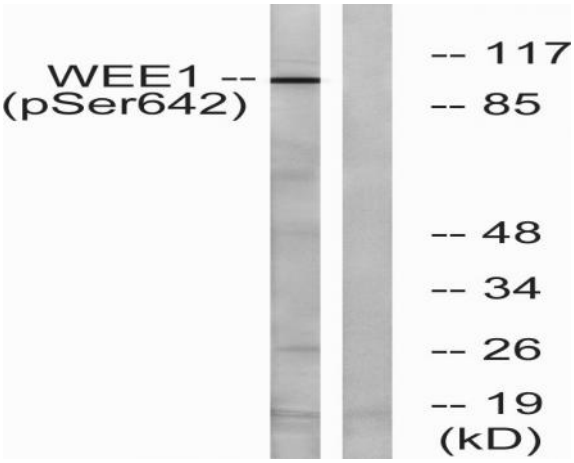
Products Images



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,Inventbiotech,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.