WEE1 (Phospho-Ser642) Antibody

Catalog No: #11706

Package Size: #11706-1 50ul #11706-2 100ul

Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

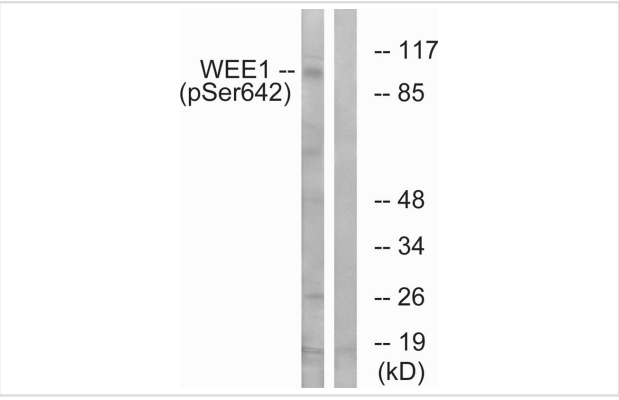
Description

Product Name	WEE1 (Phospho-Ser642) Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Antibodies were produced by immunizing rabbits with synthetic phosphopeptide and KLH conjugates. Antibodies were purified by affinity-chromatography using epitope-specific phosphopeptide. Non-phospho specific antibodies were removed by chromatogramphy using non-phosphopeptide.
Applications	WB
Species Reactivity	Hu Ms Rt
Specificity	The antibody detects endogenous levels of WEE1 only when phosphorylated at serine 642.
Immunogen Type	Peptide-KLH
Immunogen Description	Peptide sequence around phosphorylation site of Serine 642(S-V-S(p)-L-T) derived from Human WEE1.
Target Name	WEE1
Modification	Phospho
Other Names	WEE1A; WEE1hu; kinase WEE1;
Accession No.	Swiss-Prot#: P30291; NCBI Gene#: 7465; NCBI Protein#: NP_003381.1.
Uniprot	P30291
GeneID	7465;
SDS-PAGE MW	100kd
Concentration	1.0mg/ml
Formulation	Rabbit IgG in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C/1 year

Application Details

Western blotting: 1:500~1:1000

Images



Western blot analysis of extracts from 293 cells treated with etoposide using WEE1 (Phospho-Ser642) Antibody #11706.The lane on the right is treated with the antigen-specific peptide.

Background

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.

Watanabe N., EMBO J. 14:1878-1891(1995).
Cichutek A., Cytogenet. Cell Genet. 93:277-283(2001).
Igarashi M., Nature 353:80-83(1991)

Note: This product is for in vitro research use only