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Anti-WEE1 (pS642) Antibody

Rabbit polyclonal antibody to WEE1 (pS642)
Catalog # AP61084

Product Information

Application	WB
Primary Accession	P30291
Other Accession	P47810
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	71597

Additional Information

Gene ID	7465
Other Names	Wee1-like protein kinase; WEE1hu; Wee1A kinase
Target/Specificity	Recognizes endogenous levels of WEE1 (pS642) protein.
Dilution	WB~~WB (1/500 - 1/1000)
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

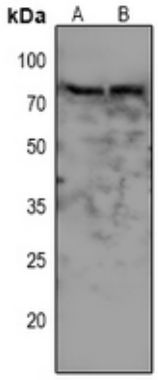
Name	WEE1 {ECO:0000303|PubMed:8348613, ECO:0000312|HGNC:HGNC:12761}
Function	Acts as a negative regulator of entry into mitosis (G2 to M transition) by protecting the nucleus from cytoplasmically activated cyclin B1-complexed CDK1 before the onset of mitosis by mediating phosphorylation of CDK1 on 'Tyr-15' (PubMed:15070733, PubMed:7743995, PubMed:8348613, PubMed:8428596). Specifically phosphorylates and inactivates cyclin B1-complexed CDK1 reaching a maximum during G2 phase and a minimum as cells enter M phase (PubMed:7743995, PubMed:8348613, PubMed:8428596). Phosphorylation of cyclin B1-CDK1 occurs exclusively on 'Tyr-15' and phosphorylation of monomeric CDK1 does not occur (PubMed:7743995, PubMed:8348613, PubMed:8428596). Its activity increases during S and G2 phases and decreases at M phase when it is hyperphosphorylated (PubMed:7743995). A correlated decrease in protein level occurs at M/G1 phase, probably due to its degradation (PubMed:7743995).

Cellular Location Nucleus.

Background

KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human WEE1. The exact sequence is proprietary.

Images



Western blot analysis of WEE1 (pS642) expression in mouse brain (A), rat brain (B) whole cell lysates.