

Mouse Wee1 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP19012C

Specification

Mouse Wee1 Antibody (Center) - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Isotype Calculated MW Antigen Region WB,E <u>P47810</u> <u>Q63802</u>, <u>NP_033542.2</u> Human Rat Rabbit Polyclonal Rabbit IgG 71578 202-230

Mouse Wee1 Antibody (Center) - Additional Information

Gene ID 22390

Other Names Wee1-like protein kinase, Wee1A kinase, Wee1

Target/Specificity

This Mouse Wee1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 202-230 amino acids from the Central region of mouse Wee1.

Dilution WB~~1:1000 E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions Mouse Wee1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Mouse Weel Antibody (Center) - Protein Information

Name Wee1



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.

Cellular Location

Nucleus {ECO:0000250|UniProtKB:P30291}.

Mouse Wee1 Antibody (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Mouse Wee1 Antibody (Center) - Images



Mouse Wee1 Antibody (Center) (Cat. #AP19012c) western blot analysis in WiDr cell line lysates (35ug/lane).This demonstrates the Wee1 antibody detected the Wee1 protein (arrow).

Mouse Wee1 Antibody (Center) - Background

Wee1 may act 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. 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. 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 (By similarity).



Mouse Wee1 Antibody (Center) - References

Muller, M., et al. J. Cell. Sci. 123 (PT 2), 286-294 (2010) : Kim, M.J., et al. Oncol. Rep. 19(5):1323-1329(2008) Tanaka, Y., et al. Biochem. Biophys. Res. Commun. 352(1):21-28(2007) Tominaga, Y., et al. Int. J. Biol. Sci. 2(4):161-170(2006) Park, C.E., et al. Cells Tissues Organs (Print) 177(4):221-228(2004)