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Mouse Wee1 Antibody (Center) Blocking Peptide

Synthetic peptide
Catalog # BP19012c

Specification

Mouse Wee1 Antibody (Center) Blocking Peptide - Product Information

Primary Accession P47810

Mouse Wee1 Antibody (Center) Blocking Peptide - Additional Information

Gene ID 22390

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

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

Mouse Wee1 Antibody (Center) Blocking Peptide - 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 (By similarity).

Cellular Location
Nucleus.

Mouse Wee1 Antibody (Center) Blocking Peptide - Protocols

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

- Blocking Peptides

Mouse Wee1 Antibody (Center) Blocking Peptide - Images

Mouse Wee1 Antibody (Center) Blocking Peptide - 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) Blocking Peptide - 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)