

# Mouse Wee2 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP14472c

### **Specification**

# Mouse Wee2 Antibody (Center) - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW Antigen Region WB, IHC-P,E <u>Q66JT0</u> <u>NP\_958758.2</u> Human, Mouse Rabbit Polyclonal Rabbit IgG 62343 364-393

# Mouse Wee2 Antibody (Center) - Additional Information

Gene ID 381759

**Other Names** Wee1-like protein kinase 2, Wee1-like protein kinase 1B, Wee1B kinase, mWee1B, Wee2, Wee1b

#### Target/Specificity

This Mouse Wee2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 364-393 amino acids from the Central region of mouse Wee2.

**Dilution** WB~~1:1000 IHC-P~~1:10~50

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 Wee2 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

## Mouse Wee2 Antibody (Center) - Protein Information

Name Wee2

Synonyms Weelb



**Function** Oocyte-specific protein tyrosine kinase that phosphorylates and inhibits CDK1 and acts as a key regulator of meiosis during both prophase I and metaphase II. Required to maintain meiotic arrest in oocytes during the germinal vesicle (GV) stage, a long period of quiescence at dictyate prophase I, by phosphorylating CDK1 at 'Tyr-15', leading to inhibit CDK1 activity and prevent meiotic reentry. Also required for metaphase II exit during egg activation by phosphorylating CDK1 at 'Tyr-15', to ensure exit from meiosis in oocytes and promote pronuclear formation.

### **Cellular Location**

Cytoplasm. Nucleus. Note=Localizes mainly in the nucleus. Exported from the nucleus to the cytoplasm before germinal vesicle breakdown (GVBD), allowing meiosis resumption

**Tissue Location** Ovary-specific..

#### Mouse Wee2 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 Wee2 Antibody (Center) - Images



Mouse Wee2 Antibody (Center) (Cat. #AP14472c) western blot analysis in HepG2 cell line lysates (35ug/lane). This demonstrates the Wee2 antibody detected the Wee2 protein (arrow).





Mouse Wee2 Antibody (Center) (AP14472c)immunohistochemistry analysis in formalin fixed and paraffin embedded mouse ovarian tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of Mouse Wee2 Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.

# Mouse Wee2 Antibody (Center) - Background

Phosphorylates and inhibits CDK1. May act as a negative regulator of entry into mitosis (G2 to M transition).

# Mouse Wee2 Antibody (Center) - References

Oh, J.S., et al. J. Cell Biol. 188(2):199-207(2010) Joshi, S., et al. BMC Dev. Biol. 7, 67 (2007) : Han, S.J., et al. Curr. Biol. 15(18):1670-1676(2005) Nakanishi, M., et al. Genes Cells 5(10):839-847(2000)