**FoxM1 (D12D5) XP® Rabbit mAb**

For Research Use Only. Not For Use In Diagnostic Procedures.

**Application** | **Species Cross-Reactivity** | **Molecular Wt.** | **Isotype** |
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W, IF-IC | H | 110 kDa | Rabbit IgG** |
Endogenous | | | |

**Background:** Forkhead box M1 (FoxM1) is a forkhead box family transcription factor that regulates a number of genes throughout the cell cycle to help control DNA replication, mitosis, and cell proliferation. FoxM1 expression increases during G1 and S and reaches maximum levels in G2/M (1-3). Nuclear translocation occurs just before entry into G2/M and is associated with FoxM1 phosphorylation (4). Phosphorylation of FoxM1 by MAPK (Ser331, Ser704), Cyclin/Cdk (Ser4, Ser35, Thr600, Thr611, Thr620, Thr627, Ser638), Pkl1 (Ser715, Ser724), and Chk2 (Ser376) stabilizes and activates FoxM1 (4-8). Forkhead box M1 is expressed in all embryonic tissues but is restricted to proliferating tissues in adults (9). Research studies show that FoxM1 expression is negatively regulated by p53 (10,11). Upregulation of FoxM1 is associated with many human cancers, including prostate, breast, lung, ovary, colon, pancreas, stomach, bladder, liver, and kidney, and may be associated with p53 mutations in some tumors (11,12). As a result, FoxM1 inhibitors have become a topic of interest for potential cancer therapy (13).

**Specificity/Sensitivity:** FoxM1 (D12D5) XP® Rabbit mAb detects endogenous levels of total FoxM1 protein. This antibody is predicted to recognize all three isoforms (FoxM1a, FoxM1b and FoxM1c). Confocal immunofluorescent analysis of HeLa cells, untreated (upper) or aphidicolin-treated (lower), using FoxM1 (D12D5) XP® Rabbit mAb (green). Actin filaments were labeled with DyLight™ 554 Phalloidin #13054 (red).

**Source/Purification:** Monoclonal antibody is produced by immunizing animals with recombinant protein to the human FoxM1b protein.

**Recommended Antibody Dilutions:** Western blotting 1:1000

**Recommended Antibody Dilutions:** Immunofluorescence (IF-IC) 1:100

**Storage:** Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at –20°C. Do not aliquot the antibody.

**Anti-rabbit secondary antibodies must be used to detect this antibody.**

**Recommended Antibody Dilutions:** Western blotting 1:1000

**Recommended Antibody Dilutions:** Immunofluorescence (IF-IC) 1:100

**For product specific protocols and a complete listing of recommended companion products please see the product web page at www.cellsignal.com**

**Background References:**

**IMPORTANT:** For western blots, incubate membrane with diluted antibody in 5% w/v BSA, 1X TBS, 0.1% Tween®20 at 4°C with gentle shaking, overnight.

**Order Information:**
- 877-616-CELL (2355)
- 877-616-TECH (8324)
- www.cellsignal.com

**Entrez Gene ID:** #2305
**UniProt ID:** #008050

**Supplementary Information:**
- **Storage:** Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at –20°C. Do not aliquot the antibody.

**Recommended Antibody Dilutions:** Western blotting 1:1000

**Recommended Antibody Dilutions:** Immunofluorescence (IF-IC) 1:100

**For product specific protocols and a complete listing of recommended companion products please see the product web page at www.cellsignal.com**

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**IMPORTANT:** For western blots, incubate membrane with diluted antibody in 5% w/v BSA, 1X TBS, 0.1% Tween®20 at 4°C with gentle shaking, overnight.

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