

Phospho-FoxM1 (Ser35) Antibody



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For Research Use Only. Not for Use in Diagnostic Procedures.

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|---------------------------|-------------------------|-----------------------------------|-------------------------|----------------------------------|-------------------------------|--------------------------------|
| Applications: W | Reactivity: H | Sensitivity: Endogenous | MW (kDa): 125 | Source/Isotype: Rabbit | UniProt ID: #Q08050 | Entrez-Gene Id: 2305 |
|---------------------------|-------------------------|-----------------------------------|-------------------------|----------------------------------|-------------------------------|--------------------------------|

Product Usage Information

Application

Western Blotting

Dilution

1:1000

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

Specificity/Sensitivity

Phospho-FoxM1 (Ser35) Antibody recognizes endogenous levels of FoxM1 protein only when phosphorylated at Ser35.

Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic phosphopeptide corresponding to residues surrounding Ser35 of human FoxM1 protein. Antibodies are purified by protein A and peptide affinity chromatography.

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), Plk1 (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).

Background References

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11. Pandit, B. et al. (2009) *Cell Cycle* 8, 3425-7.
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Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

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

Applications Key

W: Western Blotting

Cross-Reactivity Key

H: Human

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