

FoxM1 (D3F2B) Rabbit mAb (Flow Formulated)

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

Applications: FC-FP	Reactivity: H	Sensitivity: Endogenous	Source/Isotype: Rabbit IgG	UniProt ID: #Q08050	Entrez-Gene Id: 2305
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Product Usage Information**Application**

Flow Cytometry (Fixed/Permeabilized)

Dilution

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.

Specificity/Sensitivity

FoxM1 (D3F2B) Rabbit mAb (Flow Formulated) recognizes endogenous levels of total FoxM1 protein.

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Val699 of human FoxM1 protein.

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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Species Reactivity

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

Applications Key

FC-FP: Flow Cytometry (Fixed/Permeabilized)

Cross-Reactivity Key

H: Human

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