Anti-FOXM1 antibody

Description	Unconjugated Rabbit polyclonal to FOXM1

Model	STJ190208
Host	Rabbit
Reactivity	Human, Mouse, Rat
Applications	ELISA, WB
Immunogen	Synthesized peptide derived from human FOXM1 protein.
Immunogen Region	190-270aa
Gene ID	2305
Gene Symbol	FOXM1
Dilution range	WB 1:500-2000 ELISA 1:5000-20000
Specificity	FOXM1 Polyclonal Antibody detects endogenous levels of protein.
Tissue Specificity	Expressed in thymus, testis, small intestine, colon followed by ovary. Appears to be expressed only in adult organs containing proliferating/cycling cells or in response to growth factors. Also expressed in epithelial cell lines derived from tumors. Not expressed in resting cells. Isoform 2 is highly expressed in testis.
Purification	FOXM1 antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Note	For Research Use Only (RUO).
Protein Name	Forkhead box protein M1 Forkhead-related protein FKHL16 Hepatocyte nuclear factor 3 forkhead homolog 11 HFH-11 HNF-3/fork-head homolog 11 M-phase phosphoprotein 2 MPM-2 reactive phosphoprotein 2 Transcription

	fact
Molecular Weight	83 kDa
Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	Liquid form in PBS containing 50% glycerol,and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:3818OMIM:602341
Alternative Names	Forkhead box protein M1 Forkhead-related protein FKHL16 Hepatocyte nuclear factor 3 forkhead homolog 11 HFH-11 HNF-3/fork-head homolog 11 M-phase phosphoprotein 2 MPM-2 reactive phosphoprotein 2 Transcription fact
Function	Transcriptional factor regulating the expression of cell cycle genes essential for DNA replication and mitosis. Plays a role in the control of cell proliferation. Plays also a role in DNA breaks repair participating in the DNA damage checkpoint response.
Sequence and Domain Family	Within the protein there is a domain which acts as a transcriptional activator. Insertion of a splicing sequence within it inactivates this transcriptional activity, as it is the case for isoform 4.
Cellular Localization	Nucleus.
Post-translational Modifications	Phosphorylated in M (mitotic) phase. Phosphorylation by the checkpoint kinase CHEK2 in response to DNA damage increases the FOXM1 protein stability probably stimulating the transcription of genes involved in DNA repair. Phosphorylated by CDK1 in late S and G2 phases, creating docking sites for the POLO box domains of PLK1. Subsequently, PLK1 binds and phosphorylates FOXM1, leading to activation of transcriptional activity and subsequent enhanced expression of key mitotic regulators.