

Rabbit FOXM1 Polyclonal Antibody | anti-FOXM1 antibody

FOXM1 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA326712	Rabbit	Human, Mouse, Rat	ELISA, Immunohistochemistry, Western Blot

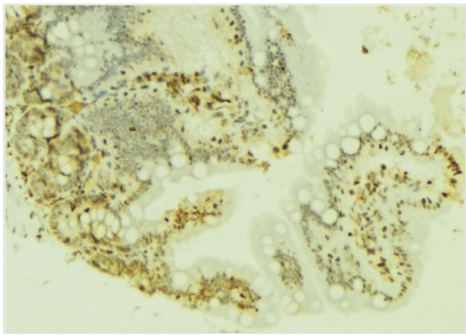
PRODUCT SYNONYMS

FOXM1; Polyclonal Antibody; FOXM1 Antibody; FKHL16; Forkhead box M1; Forkhead box protein M1; forkhead like 16; Forkhead-related protein FKHL16; FOX M1; Foxm1; FOXM1_HUMAN; FOXM1B; Hepatocyte nuclear factor 3 forkhead homolog 11; HFH-11; HFH11; HNF-3/fork-head homolog 11; HNF3; INS1; M phase phosphoprotein 2; M-phase phosphoprotein 2; MPHOSPH2; MPM-2 reactive phosphoprotein 2; MPP2; PIG29; TGT3; Transcription factor Trident; Trident; WIN; Winged-helix factor from INS-1 cells; Winged-helix factor from INS1 cells; anti-FOXM1 antibody

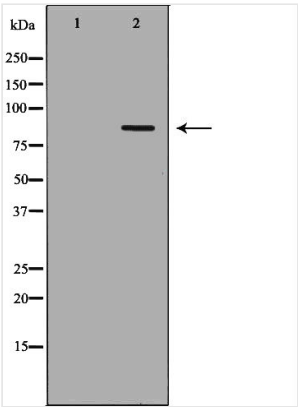
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	FOXM1 antibody detects endogenous levels of total FOXM1
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	748
Applicable Applications for anti-FOXM1 antibody	ELISA, IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human FOXM1
Subcellular Location	Nucleus.
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.
Predicted Cross Reactivity	Pig, Zebrafish, Bovine, Horse, Sheep, Rabbit, Dog, Xenopus
Similarity	Pig (100%), Zebrafish (83%), Bovine (100%), Horse (100%), Sheep (100%), Rabbit (92%), Dog (100%), Xenopus (92%)
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



IHC (Immunohistochemistry)
AAA326712 at 1/100 staining Mouse colon tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.



WB (Western Blot)
Western blot analysis of Mouse spleen lysate, using FOXM1 Antibody. The lane on the left is treated with the antigen-specific peptide.

ADDITIONAL INFORMATION

Related Product Information for anti-
FOXM1 antibody

Description: 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 (Thr600, Thr611, Thr672), Plk1 (Ser715, Ser724), and Chk2 (Ser376) stabilizes and activates FoxM1 (4-7). Forkhead box M1 is expressed in all embryonic tissues but is restricted to proliferating tissues in adults (8). Recent studies have shown that FoxM1 expression is negatively regulated by p53 (9, 10). 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 (10, 11). As a result, FoxM1 inhibitors have become a topic of interest for potential cancer therapy (12).

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.

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.

Similarity: 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.

NCBI AND UNIPROT INFORMATION

NCBI GI #	340545543
NCBI GeneID	2305
NCBI Accession #	NP_001230017.1
NCBI GenBank Nucleotide #	NM_001243088.1
UniProt Accession #	Q08050; O43258; O43259; O43260; Q4ZGG7; Q9BRL2
Molecular Weight	Observed: 83 kDa Predicted: 85 kDa
NCBI Official Full Name	forkhead box protein M1 isoform 4
NCBI Official Synonym Full Names	forkhead box M1
NCBI Official Symbol	FOXM1

NCBI Official Synonym Symbols	MPP2; HFH11; HNF-3; INS-1; MPP-2; PIG29; FKHL16; FOXM1A; FOXM1B; FOXM1C; HFH-11; TRIDENT; MPHOSPH2
NCBI Protein Information	forkhead box protein M1
UniProt Protein Name	Forkhead box protein M1
UniProt Gene Name	FOXM1
UniProt Synonym Gene Names	FKHL16; HFH11; MPP2; WIN; HFH-11; HNF-3/fork-head homolog 11

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/foxm1-antibody-immunohistochemistry-western-blot-elisa/326712>