

Mouse ATM Monoclonal Antibody | anti-ATM antibody

ATM (Ser-1981), phospho-specific Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA71562	Mouse	Human, Rat, Mouse	Immunocytochemistry, Immunoprecipitation, ELISA, Western Blot

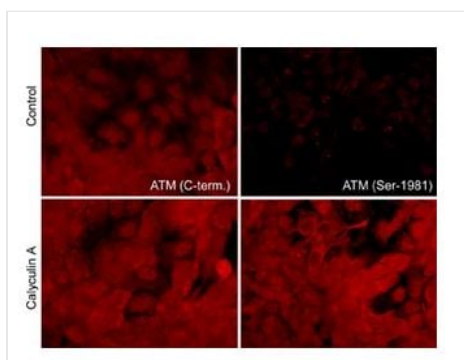
PRODUCT SYNONYMS

ATM; Monoclonal Antibody; ATM (Ser-1981); phospho-specific Antibody; phospho-specific; ATM Ser1981; anti-ATM antibody

PRODUCT SPECIFICATIONS

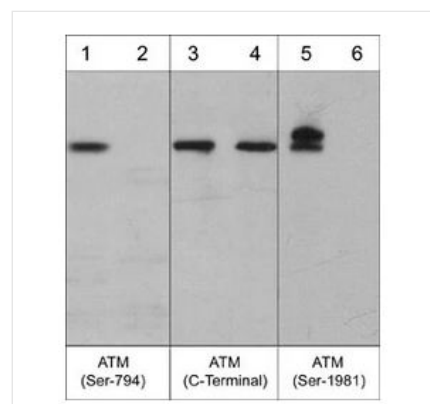
Host	Mouse
Reactivity	Human, Rat, Mouse
Clonality	Monoclonal
Isotype	IgG1
Clone Number	M366
Specificity	This antibody detects a 370kDa* protein corresponding to the molecular mass of ATM on SDS-PAGE immunoblots of calyculin A treated human A431 and Jurkat Cells, but is not observed in control cells.
Form/Format	Mouse monoclonal, protein A purified antibody is supplied in 100ul phosphate-buffered saline, 50% glycerol, 1mg/ml BSA, and 0.05% sodium azide.
Applicable Applications for anti-ATM antibody	ICC (Immunocytochemistry), IP (Immunoprecipitation), ELISA, WB (Western Blot)
Immunogen	Clone M366 was generated from a phospho-peptide that included amino acids surrounding Serine 1981 in human ATM. This sequence has high homology to the conserved site in rat and mouse ATM.
Preparation and Storage	Store at -20 degree C. Stable for 1 year.

IMAGES



ICC (Immunocytochemistry)

Immunocytochemical labeling of ATM phosphorylation in control (Top row) or calyculin A-treated A431 cells (Bottom row). The cells were labeled with mouse monoclonal ATM (C-terminal region) (AM3611) and ATM (Ser-1981) (AM3661). The antibodies were detected using goat anti-mouse-DyLight 594.



WB (Western Blot)

Western blot of human A431 cells treated with Calyculin A (100nM) for 30 min. Blot lanes were untreated (lanes 1, 3, & 5) or treated with lambda phosphatase (lanes 2, 4, & 6) then probed with anti-ATM (Ser-794) (lanes 1 & 2), anti-ATM (C-Terminal) (lanes 3 & 4), or anti-ATM (Ser-1981) (lanes 5 & 6).

ADDITIONAL INFORMATION

Related Product Information for anti-ATM antibody	Ataxia telangiectasia mutated kinase (ATM) is a serine/threonine kinase that regulates cell cycle checkpoints and DNA repair. Mutations of ATM cause a spectrum of defects ranging from neurodegeneration to cancer predisposition. Activation of ATM after DNA damage involves Cdk5 mediated phosphorylation of Ser-794 followed by autophosphorylation at Ser-1891. Active ATM kinase regulates a number of proteins involved in cell cycle checkpoint control, apoptosis and DNA repair. The Cdk5-ATM pathway regulates phosphorylation and function of the ATM targets p53 and H2AX in postmitotic neurons. Other known substrates of ATM include Chk2, Chk1, CtIP, 4E-BP1, BRCA1, RPA3, SMC1, FANCD2, Rad17, Artemis, Nbs1, and the I-2 regulatory subunit of PP1. Thus, activation of Cdk5 by DNA damage may be an important initiator of ATM-dependent regulation of cell cycle checkpoints.
References	Tian, B. et al. (2009) Nat Cell Biol. 11:211. Lee, J.H. & Paull, T.T. (2007) Oncogene 26:7741. Shiloh, Y. (1997) Annu Rev Genet. 31:635.

NCBI AND UNIPROT INFORMATION

NCBI GI #	187951615
NCBI GeneID	472
UniProt Accession #	Q13315; O15429; Q12758; Q16551; Q93007; Q9NP02; Q9UCX7; B2RNX5
Molecular Weight	350,714 Da
NCBI Official Full Name	Ataxia telangiectasia mutated
NCBI Official Synonym Full Names	ataxia telangiectasia mutated
NCBI Official Symbol	ATM
NCBI Official Synonym Symbols	AT1; ATA; ATC; ATD; ATE; ATDC; TEL1; TELO1
NCBI Protein Information	serine-protein kinase ATM; AT mutated; A-T mutated; TEL1, telomere maintenance 1, homolog
UniProt Protein Name	Serine-protein kinase ATM
UniProt Gene Name	ATM
UniProt Synonym Gene Names	A-T mutated
UniProt Entry Name	ATM_HUMAN

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/monoclonal/atm-antibody-clone-m366-immunocytochemistry-immunoprecipitation-western-blot-elisa/71562>