

ATM recombinant antibody

ATM Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA243817	Rabbit	Human	Flow Cytometry, Functional Assay, Immunohistochemistry, ELISA

PRODUCT SYNONYMS

ATM; Monoclonal Recombinant Antibody; ATM Antibody; Serine-protein kinase ATM (EC 2.7.11.1) (Ataxia telangiectasia mutated) (A-T mutated); ATM recombinant antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human
Clonality	Monoclonal
Isotype	Rabbit IgG
Clone Number	3G11
Purity/Purification	Affinity-chromatography
Form/Format	Liquid. Rabbit IgG in phosphate buffered saline, PH7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Applicable Applications for ATM recombinant antibody	FCM/FACS (Flow Cytometry), IHC (Immunohistochemistry), ELISA
Antibody Type	Recombinant Antibody
Conjugation	Non-conjugated
Immunogen	A synthesized peptide derived from human ATM
Preparation and Storage	Upon receipt, store at -20 degree C or -80 degree C. Avoid repeated freeze.

IMAGES



FCM/FACS (Flow Cytometry)

Overlay histogram showing Hela cells stained with (red line) at 1:250. The cells were fixed with 70% Ethylalcohol (18h) and then incubated in 10% normal goat serum to block non-specific protein-protein interactions followed by the antibody (1ug/1*10⁶cells) for 1 h at 4?. The secondary antibody used was FITC-conjugated goat anti-rabbit IgG (H+L) at 1/200 dilution for 30min at 4?. Control antibody (green line) was Rabbit IgG (1ug/1*10⁶cells) used under the same conditions. Acquisition of >10,000 events was performed.



IHC (Immunohistochemistry)

IHC image diluted at 1:100 and staining in paraffin-embedded human testis tissue performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4 degree C overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05% DAB.



IHC (Immunohistochemistry)

IHC image diluted at 1:100 and staining in paraffin-embedded human breast cancer performed on a Leica Bond™ system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4 degree C overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05% DAB.

ADDITIONAL INFORMATION

Related Product Information for ATM recombinant antibody	Serine/threonine protein kinase which activates checkpoint signaling upon double strand breaks (DSBs), apoptosis and genotoxic stresses such as ionizing ultraviolet A light (UVA), thereby acting as a DNA damage sensor. Recognizes the substrate consensus sequence [ST]-Q. Phosphorylates 'Ser-139' of histone variant H2AX/H2AFX at double strand breaks (DSBs), thereby regulating DNA damage response mechanism. Also plays a role in pre-B cell allelic exclusion, a process leading to expression of a single immunoglobulin heavy chain allele to enforce clonality and monospecific recognition by the B-cell antigen receptor (BCR) expressed on individual B-lymphocytes. After the introduction of DNA breaks by the RAG complex on one immunoglobulin allele, acts by mediating a repositioning of the second allele to pericentromeric heterochromatin, preventing accessibility to the RAG complex and recombination of the second allele. Also involved in signal transduction and cell cycle control. May function as a tumor suppressor. Necessary for activation of ABL1 and SAPK. Phosphorylates DYRK2, CHEK2, p53/TP53, FANCD2, NFKBIA, BRCA1, CTIP, nibrin (NBN), TERF1, RAD9 and DCLRE1C. May play a role in vesicle and/or protein transport. Could play a role in T-cell development, gonad and neurological function. Plays a role in replication-dependent histone mRNA degradation. Binds DNA ends. Phosphorylation of DYRK2 in nucleus in response to genotoxic stress prevents its MDM2-mediated ubiquitination and subsequent proteasome degradation. Phosphorylates ATF2 which stimulates its function in DNA damage response.
Product Categories/Family for ATM recombinant antibody	Epigenetics and Nuclear Signaling; Cancer

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.