



# ATM Antibody

<b>Product Code</b>	CSB-RA618770A0HU
<b>Abbreviation</b>	Serine-protein kinase ATM
<b>Storage</b>	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
<b>Uniprot No.</b>	Q13315
<b>Immunogen</b>	A synthesized peptide derived from human ATM
<b>Species Reactivity</b>	Human
<b>Tested Applications</b>	ELISA, WB, IP; Recommended dilution: WB:1:500-1:5000, IP:1:200-1:1000
<b>Relevance</b>	<p>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.</p>
<b>Form</b>	Liquid
<b>Conjugate</b>	Non-conjugated
<b>Storage Buffer</b>	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
<b>Purification Method</b>	Affinity-chromatography
<b>Isotype</b>	Rabbit IgG
<b>Clonality</b>	Monoclonal
<b>Product Type</b>	Recombinant Antibody
<b>Immunogen Species</b>	Homo sapiens (Human)

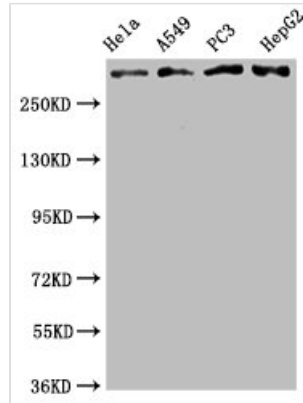


**Research Area** Epigenetics and Nuclear Signaling

**Gene Names** ATM

**Accession NO.** 4E11

**Image**



**Western Blot**

Positive WB detected in: HeLa whole cell lysate, A549 whole cell lysate, PC3 whole cell lysate, HepG2 whole cell lysate

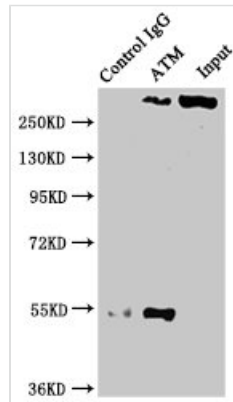
All lanes: ATM antibody at 2.05µg/ml

Secondary

Goat polyclonal to rabbit IgG at 1/50000 dilution

Predicted band size: 350 KDa

Observed band size: 350 KDa



**Immunoprecipitating ATM in PC3 whole cell lysate**

Lane 1: Rabbit control IgG instead of CSB-RA618770A0HU in PC3 whole cell lysate. For western blotting, a HRP-conjugated Protein G antibody was used as the secondary antibody (1/2000)

Lane 2: CSB-RA618770A0HU (3µg) + PC3 whole cell lysate (500µg)

Lane 3: PC3 whole cell lysate (20µg)