Product Name: KD-Validated ATM Serine/Threonine Kinase Recombinant Rabbit Monoclonal Antibody
Catalog #: KVAb01439
For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,FCM,ICC,IHC-P
Reactivity	Human
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Rabbit IgG
Clonality	Rabbit mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:1,000-1:5,000; FC 1:200-1:2,000; ICC 1:100-1:1,000; IHC-P 1:100-1:200
Molecular Weight	Calculated MW: 350.7kDa

Antigen Information

Gene Name	ATM
Alternative Names	ATM; ATM Serine/Threonine Kinase; Ataxia Telangiectasia Mutated; TELO1; TEL; Serine-Protein Kinase ATM; A-T Mutated; EC 2.7.11.1; ATDC; ATA; ATC; ATD; Ataxia Telangiectasia Mutated (Includes Complementation Groups A, C And D; TEL1, Telomere Maintenance 1, Homolog (S. Cerevisiae); TEL1, Telomere Maintenance 1, Homolog; Serine/Threonine Kinase AT; AT Mutated; AT1; ATE
Gene ID	472.0
SwissProt ID	Q13315
Immunogen	A synthesized peptide derived from human ATM

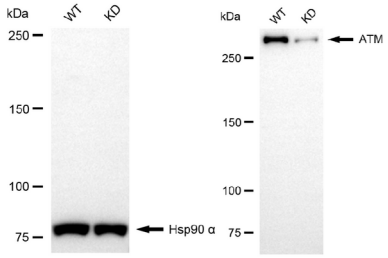
Background

The protein encoded by this gene belongs to the PI3/PI4-kinase family. This protein is an important cell cycle checkpoint kinase that phosphorylates; thus, it functions as a regulator of a wide variety of downstream proteins, including tumor suppressor proteins p53 and BRCA1, checkpoint kinase CHK2, checkpoint proteins RAD17 and RAD9, and DNA repair protein NBS1. This protein and the closely related kinase ATR are thought to be master controllers of cell cycle checkpoint signaling pathways that are required for cell response to DNA damage and for genome stability. Mutations in this gene are associated with ataxia telangiectasia, an autosomal recessive disorder. [provided by RefSeq, Aug 2010]

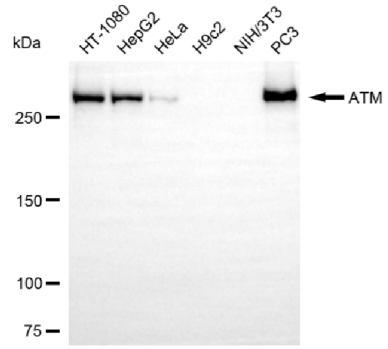
Research Area

Epigenetics and Nuclear Signaling,Cancer

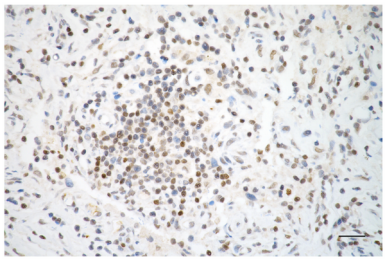
Image Data



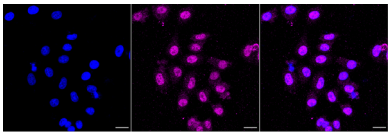
Western blotting analysis using ATM antibody (KVAb01439). ATM expression in wild type (WT) and ATM knockdown (KD) 293T cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with ATM antibody (KVAb01439, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



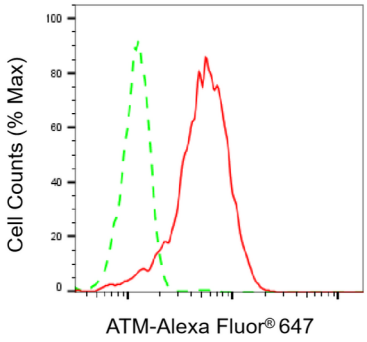
Western blotting analysis using ATM antibody (KVAb01439). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with ATM antibody (KVAb01439, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Immunohistochemistry was performed on paraffin-embedded human breast carcinoma using ATM antibody (KVAb01439, 1:200). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40× objective). Scale bar: 25 µm.



Immunocytochemical staining of HepG2 cells with ATM antibody (KVAb01439, 1:1,000). Nuclei were stained blue with DAPI; ATM was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar, 20 µm.



Flow cytometric analysis of ATM expression in HepG2 cells using ATM antibody (KVAb01439, 1:2,000). Green, isotype control; red, ATM.