Anti-Phospho-ATM (Ser1981) Rabbit mAb

Purified Recombinant Rabbit Monoclonal Antibody

Catalog # R013746

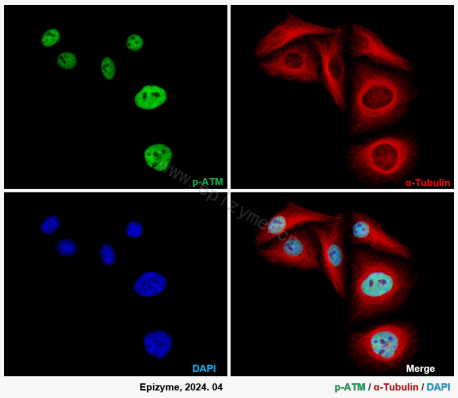
Product Information

Application	IHC-P/IF (Tissue-P), IF (Cell)/ICC, ELISA
Reactivity	Human, Mouse
Dilution	IHC-P 1:200; IF 1:100
Host	Rabbit
Clonality	Monoclonal
Clone No.	21D98L56
Isotype	IgG
Label	Unconjugated
Immunogen	A synthesized phosphopeptide corresponding to residues surrounding Ser1981 of human ATM
Format	Affinity purified monoclonal antibody supplied in PBS with 0.01% sodium azide and 50% glycerol, pH 7.3.
Storage	Shipped on wet ice. Store at -20°C. Stable for 24 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	Anti-Phospho-ATM (Ser1981) Rabbit mAb [21D98L56] is for research use only and not for use in diagnostic or therapeutic procedures.

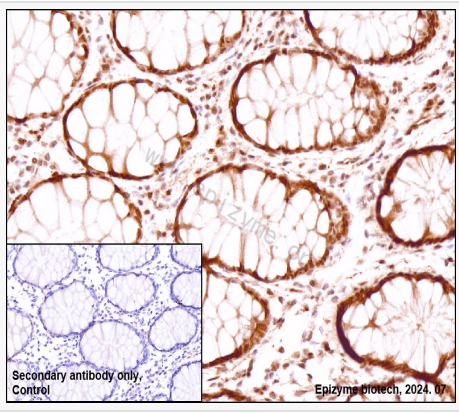
Protein Information

Synonyms	Serine-protein kinase ATM, Ataxia telangiectasia mutated, A-T mutated, ATM, AT1, ATA, ATC, ATD, ATE, ATDC, TEL1, TELO1.
Uniprot ID	Q13315
Gene ID	472
Background	ATM 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. ATM 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 the gene encoding ATM are associated with ataxia telangiectasia, an autosomal recessive disorder.
Cellular Location	Nucleus. Cytoplasmic vesicle. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome {ECO:0000250|UniProtKB:Q62388}. Note=Primarily nuclear. Found also in endocytic vesicles in association with beta-adaptin.
Tissue Location	Found in pancreas, kidney, skeletal muscle, liver, lung, placenta, brain, heart, spleen, thymus, testis, ovary, small intestine, colon and leukocytes.

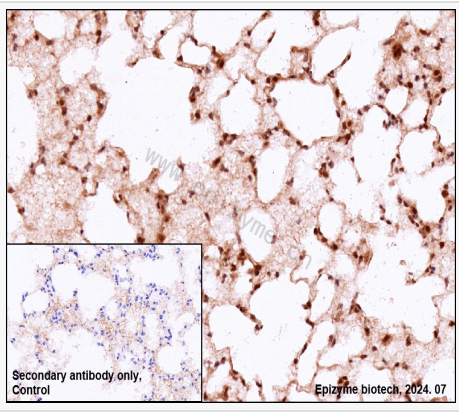
Validation Images



Immunofluorescence - Anti-Phospho-ATM (S1981) Rabbit mAb [21D98L56]
Sample: Hela cells
The cells were fixed with 4% paraformaldehyde (10 min), permeabilized with 0.5% Triton X-100 for 10 minutes and then blocked with 5% BSA in 0.1% PBS-Tween for 0.5 hours.
Primary antibodies: R013746 at 1:100 dilution and α-tubulin Mouse Monoclonal Antibody (Cat. No. LF209) at 1:100 dilution
Secondary antibodies: Goat anti-Rabbit (488) at 1:1,000 dilution (shown in green) and Goat anti-Mouse (CY3) at 1:1,000 dilution (shown in red)
Nuclei were stained with DAPI (shown in blue).



Immunohistochemistry - Anti-Phospho-ATM (Ser1981) Rabbit mAb [21D98L56]
Sample: Paraformaldehyde-fixed, paraffin embedded human colorectal carcinoma tissue
Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.
Primary antibody: R013746 at 1:200 dilution
Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP conjugated at 1:1,000 dilution
DAB was used as the chromogen.
Counter stained with hematoxylin.
Positive/negative staining were presented.
Only the secondary antibody was used as the negative control.



Immunohistochemistry - Anti-Phospho-ATM (Ser1981) Rabbit mAb [21D98L56]
Sample: Paraformaldehyde-fixed, paraffin embedded mouse lung tissue
Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.
Primary antibody: R013746 at 1:200 dilution
Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP conjugated at 1:1,000 dilution
DAB was used as the chromogen.
Counter stained with hematoxylin.
Positive/negative staining were presented.
Only the secondary antibody was used as the negative control.