Anti-Phospho-ATM (Ser1981) Rabbit mAb

Purified Recombinant Rabbit Monoclonal Antibody

Catalog # R014044

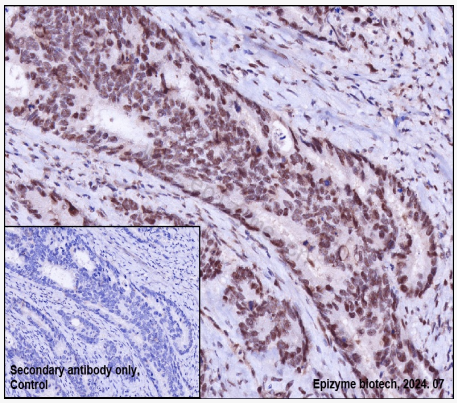
Product Information

Application	IF (Cell)/ICC, ELISA, WB, IHC-P/IF (Tissue-P)
Reactivity	Human
Dilution	WB 1:1,000~1:2,000; IHC-P 1:200; IF 1:100
Host	Rabbit
Clonality	Monoclonal
Clone No.	79T70I07
Isotype	IgG
Label	Unconjugated
Immunogen	A synthesized peptide derived from human Phospho-ATM (S1981)
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 [79T70I07] is for research use only and not for use in diagnostic or therapeutic procedures.

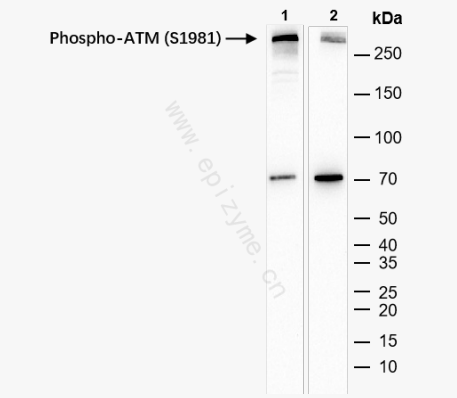
Protein Information

Synonyms	kinase ATM, Serine-protein kinase ATM, ATM(Phospho-Ser1981), ATM (phospho S1981), AT complementation group A, AT complementation group C, AT complementation group D, AT complementation group E, AT mutated, AT protein, AT1, ATA, Ataxia telangiectasia gene mutated in human beings, Ataxia telangiectasia mutated, ATC, ATDC, ATE, Human phosphatidylinositol 3 kinase homolog, Serine protein kinase ATM, T cell prolymphocytic leukemia, TEL1, TELO1, ATM serine/threonine kinase.
Calculated MW	Calculated MW: 370 kDa; Observed MW: 370 kDa
Uniprot ID	Q13315
Gene ID	472
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.

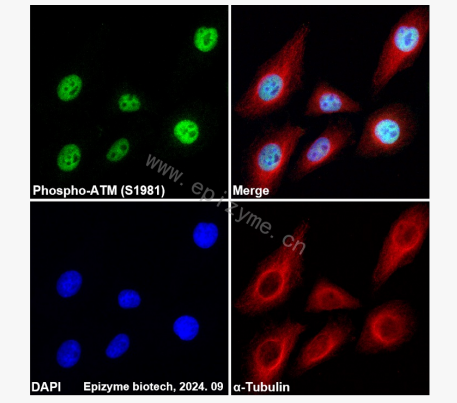
Validation Images



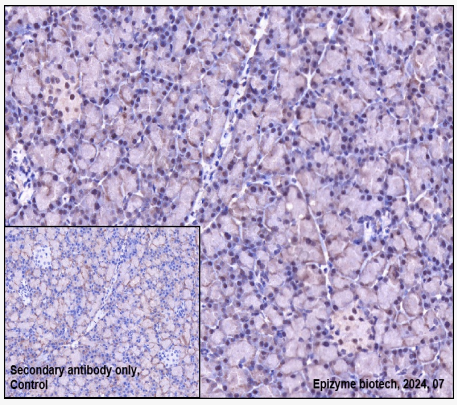
Immunohistochemistry - Anti-Phospho-ATM (Ser1981) Rabbit mAb [79T70I07]
Sample: Paraformaldehyde-fixed, paraffin embedded human colorectal carcinoma tissue
Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.
Primary antibody: R014044 at 1:200 dilution
Secondary antibody: Goat 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.



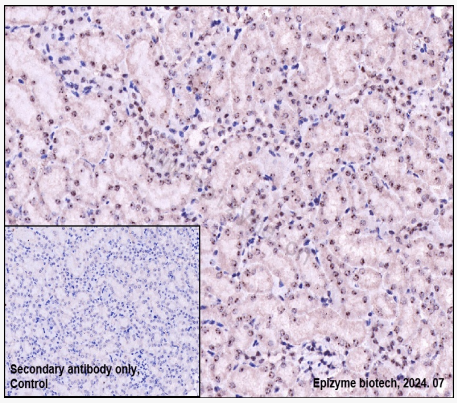
Western Blot - Anti-Phospho-ATM (Ser1981) Rabbit mAb [79T70I07]
All lanes: R014044 at 1:1,000 dilution
Lane 1: HepG2 (Human hepatocarcinoma epithelial cell) whole cell lysates
Lane 2: A431 (Human epidermoid teratoma cell line) whole cell lysates
Lysates/proteins at 10 µg per lane.
Secondary antibody: Goat Anti-Rabbit IgG(H+L), HRP Conjugated (Cat. No. LF102) at 1:5,000 dilution
Predicted band size: 370 kDa
Observed band size: 370 kDa
Developed using the ECL technique (Cat. No. SQ201).



Immunofluorescence - Anti-Phospho-ATM (Ser1981) Rabbit mAb [79T70I07]
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: R014044 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 (555) at 1:1,000 dilution (shown in red)
Nuclei were stained with DAPI (shown in blue).



Immunohistochemistry - Anti-Phospho-ATM (Ser1981) Rabbit mAb [79T70I07]
Sample: Paraformaldehyde-fixed, paraffin embedded rat pancreas tissue
Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.
Primary antibody: R014044 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 [79T70I07]
Sample: Paraformaldehyde-fixed, paraffin embedded mouse kidney tissue
Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.
Primary antibody: R014044 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.