

Phospho-ATM (Ser1981) Monoclonal Antibody (10H11.E12), eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Human, Mouse, Rat
Published Species	Human
Host/Isotype	Mouse / IgG1, kappa
Class	Monoclonal
Type	Antibody
Clone	10H11.E12
Conjugate	Unconjugated
Form	Liquid
Concentration	0.5 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2
Contains	0.09% sodium azide
Storage conditions	4° C
RRID	AB_2572918

Applications	Tested Dilution	Publications
Western Blot (WB)	Assay-Dependent	-
Immunohistochemistry (Paraffin) (IHC (P))	10 µg/mL	-
Immunocytochemistry (ICC/IF)	10 µg/mL	-
Flow Cytometry (Flow)	Assay-Dependent	1 Publication
Immunoprecipitation (IP)	Assay-Dependent	-

Product Specific Information

Description: This 10H11.E12 monoclonal antibody recognizes the human, mouse, and rat ataxia-telangiectasia (ATM) protein when phosphorylated on serine 1981. ATM belongs to the family of PI3 kinases and functions by coordinating cell cycle arrest and initiation of DNA repair through the phosphorylation of a multitude of substrates in response to DNA damage and oxidative stress. ATM exists as dimers or multimers in its inactive state but in response to DNA breaks, becomes activated through formation of monomers and autophosphorylation. Activated ATM is recruited to the site of DNA double strand breaks where it halts the cell cycle and initiates DNA repair through the phosphorylation of downstream DNA damage response pathway members. Loss of functional activity of ATM results in ataxia-telangiectasia (AT), a disease characterized by early onset neurodegeneration and predisposition to cancer. AT patients are immunodeficient, radiosensitive, and have an increased risk of certain cancer types such as lymphoma and leukemia.

Applications Reported: This 10H11.E12 antibody has been reported for use in intracellular staining followed by flow cytometric analysis, immunoprecipitation, western blotting, immunocytochemistry, and immunohistochemical staining of formalin-fixed paraffin embedded tissue sections. (Fluorochrome conjugated 10H11.E12 is recommended for use in intracellular flow cytometry.).

Applications Tested: This 10H11.E12 antibody has been tested by immunohistochemistry of formalin-fixed paraffin embedded tissue using either high or low pH antigen retrieval and can be used at less than or equal to 10 µg/mL. This 10H11.E12 antibody has been tested by immunocytochemistry of methanol or formaldehyde-fixed and permeabilized cells and can be

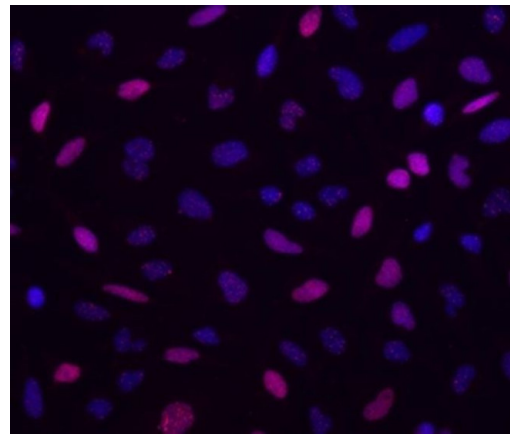
used at less than or equal to 10 µg/mL. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

Purity: Greater than 90%, as determined by SDS-PAGE.

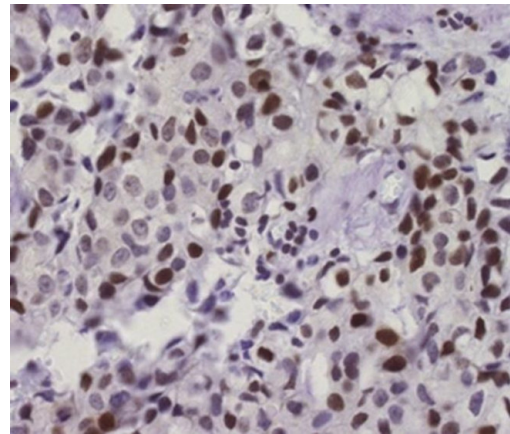
Aggregation: Less than 10%, as determined by HPLC.

Filtration: 0.2 µm post-manufacturing filtered.

Product Images For Phospho-ATM (Ser1981) Monoclonal Antibody (10H11.E12), eBioscience™



Phospho-ATM (Ser1981) Antibody (14-9046-82) in ICC/IF
Immunocytochemistry of camptothecin-treated HeLa cells using 10 µg/mL of Anti-phospho-ATM (S1981) Purified, followed by F (ab')₂ Anti-Mouse IgG eFluor® 570. Nuclei are stained with DAPI.



Phospho-ATM (Ser1981) Antibody (14-9046-82) in IHC (P)
Immunohistochemistry of formalin-fixed paraffin embedded human infiltrating ductile carcinoma using 10 µg/mL of Anti-phospho-ATM (S1981) Purified, followed by Anti-Mouse IgG Biotin, streptavidin HRP, and DAB visualization. Nuclei are counterstained with hematoxylin.

1 Reference

Flow Cytometry (1)

Journal of leukocyte biology Stromal fibroblasts support dendritic cells to maintain IL-23/Th17 responses after exposure to ionizing radiation. "14-9046 was used in Flow cytometry/Cell sorting to investigate whether dendritic cell-fibroblast crosstalk overcomes the suppressive effect of ionising radiation to support appropriately polarised Th17 responses." Authors: Malecka A, Wang Q, Shah S, Sutavani RV, Spendlove I, Ramage JM, Greensmith J, Franks HA, Gough MJ, Saalbach A, Patel PM, Jackson AM	Year 2016 Species Human
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