#### **Product Datasheet**

# ATM (Phospho-S1981) Rabbit mAb

Catalog No: #13432

Package Size: #13432-1 50ul #13432-2 100ul



Orders: order@signalwayantibody.com Support: tech@signalwayantibody.com

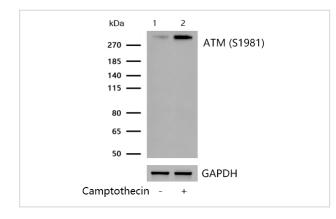
|                    |       | 4.5   |
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|                    | escri | ntion |
| $\boldsymbol{\nu}$ | COUL  | puon  |
|                    |       |       |

| Product Name          | ATM (Phospho-S1981) Rabbit mAb   |  |
|-----------------------|--|--|
| Host Species          | Rabbit   |  |
| Clonality             | Monoclonal   |  |
| Clone No.             | JM93-25  |  |
| Purification          | ProA affinity purified   |  |
| Applications          | WB, ICC/IF, IHC  |  |
| Species Reactivity    | Hu, Ms   |  |
| Immunogen Description | Synthetic phospho-peptide corresponding to residues surrounding Ser1981 of human ATM.                    |  |
| Conjugates            | Unconjugated   |  |
| Other Names           | A-T mutated antibody A-T mutated homolog antibody AT mutated antibody AT1 antibody ATA antibody          |  |
|                       | Ataxia telangiectasia mutated antibody Ataxia telangiectasia mutated gene antibody Ataxia telangiectasia |  |
|                       | mutated homolog (human) antibody Ataxia telangiectasia mutated homolog antibody ATC antibody ATD         |  |
|                       | antibody ATDC antibody ATE antibody ATM antibody ATM serine/threonine kinase antibody ATM_HUMAN          |  |
|                       | antibody DKFZp781A0353 antibody MGC74674 antibody OTTHUMP00000232981 antibody Serine protein             |  |
|                       | kinase ATM antibody Serine-protein kinase ATM antibody Serine/threonine-protein kinase ATM antibody      |  |
|                       | Tefu antibody TEL1 antibody TEL1, telomere maintenance 1, homolog antibody TELO1 antibody Telomere       |  |
|                       | fusion protein antibody  |  |
| Accession No.         | Swiss-Prot#:Q13315   |  |
| Calculated MW         | Predicted band size: 351 kDa   |  |
| SDS-PAGE MW           | Observed band size: 351 kDa  |  |
| Formulation           | 1*TBS (pH7.4), 1%BSA, 40%Glycerol. Preservative: 0.05% Sodium Azide.                                     |  |
| Storage               | Store at -20°C   |  |

## **Application Details**

WB: 1:500-1:2000 ICC/IF: 1:50-1:200 IHC: 1:50-1:200

## **Images**



All lanes: ATM (Phospho-S1981) Rabbit mAb at 1/1k dilution

Lane 1: Hela whole cell lysates

Lane 2 : Hela treated with 1 $\Xi$ OM Camptothecin for 1 hour

whole cell lysates

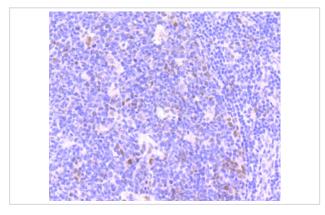
Lysates/proteins at 20 µg per lane.

Secondary

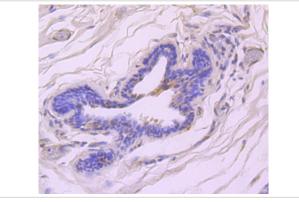
All lanes : Goat Anti-Rabbit IgG H&L (HRP) at 1/20000 dilution

Predicted band size: 351 kDa Observed band size: 351 kDa

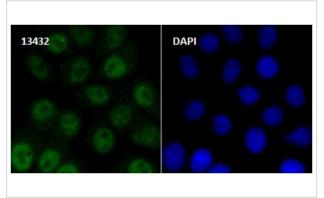
Exposure time: 10 seconds



Formalin-fixed, paraffin-embedded human tonsil tissue stained for ATM (Phospho-S1981) using 13432 at 1/100 dilution in immunohistochemical analysis.



Formalin-fixed, paraffin-embedded human breast cancer tissue stained for ATM (Phospho-phospho S1981) using 13432 at 1/100 dilution in immunohistochemical analysis.

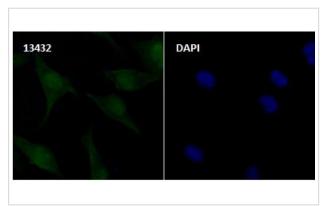


Immunocytochemistry/ Immunofluorescence ATM (Phospho-S1981) antibody (13432)

ICC/IF staining of ATM (Phospho- S1981) in HepG2 cells. Cells were fixed with 4% Paraformaldehyde permeabilized with 0.1% Triton X-100.

Samples were incubated with 13432 at a working dilution of 1/100. The secondary antibody was Alexa FluorB 488 goat anti rabbit, used at a dilution of 1/500.

Nuclei were counterstained with DAPI.



Immunocytochemistry/ Immunofluorescence ATM (Phospho-phospho S1981) antibody (13432) ICC/IF staining of ATM (Phospho-phospho S1981) in SH-SY5Y cells. Cells were fixed with 4% Paraformaldehyde permeabilized with 0.1% Triton X-100. Samples were incubated with 13432 at a working dilution of 1/100. The secondary antibody was Alexa FluorB 488 goat anti rabbit, used at a dilution of 1/500. Nuclei were counterstained with DAPI.

## Background

Serine / threonine protein kinase which activates checkpoint signaling upon double strand breaks (DSBs), apoptosis and genotoxic stresses such as ionizing ultraviolet A light (UVA), thus 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), recover equilibrium 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, Soaccessability to the RAG complex and recombination of the second allele. Also involved in signal transduction and cell cycle control. May function as A genre of activation of ABL1 and SAPK. 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.

#### References

Note: This product is for in vitro research use only and is not intended for use in humans or animals.