# ATM Antibody

Catalog No: #21147

Package Size: #21147-1 50ul #21147-2 100ul

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

## Description

| | |
|---|---|
| Product Name | ATM Antibody |
| Host Species | Rabbit |
| Clonality | Polyclonal |
| Purification | Antibodies were produced by immunizing rabbits with synthetic peptide and KLH conjugates. Antibodies were purified by affinity-chromatography using epitope-specific peptide. |
| Applications | WB IF |
| Species Reactivity | Hu |
| Specificity | The antibody detects endogenous level of total ATM protein. |
| Immunogen Type | Peptide-KLH |
| Immunogen Description | Peptide sequence around aa.1979~1983 (E-G-S-Q-S) derived from Human ATM. |
| Target Name | ATM |
| Other Names | Ataxia telangiectasia mutated homolog; Ataxia telangiectasia mutated; kinase ATM |
| Accession No. | Swiss-Prot: Q13315NCBI Protein: NP_000042.3 |
| Concentration | 1.0mg/ml |
| Formulation | Supplied at 1.0mg/mL in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. |
| Storage | Store at -20°C for long term preservation (recommended). Store at 4°C for short term use. |

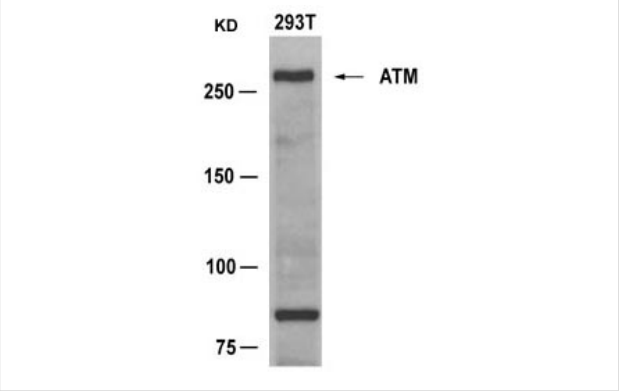
## Application Details

Predicted MW: 350kd

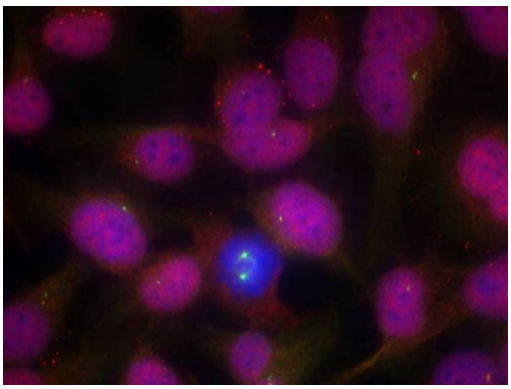
Western blotting: 1:500~1:1000

Immunofluorescence: 1:100~1:200

## Images




Western blot analysis of extracts from 293T cells using ATM(Ab-1981) Antibody #21147 and the same antibody preincubated with blocking peptide.



Immunofluorescence staining of methanol-fixed Hela cells using ATM(Ab-1981) Antibody #21147.

## Background

ATM 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. Two transcript variants encoding different isoforms have been found for this gene.

Gupta A. et al. (2005) Mol Cell Biol. 25(12): 5292-5305.
Bernstein JL. et al. (2002) Breast Cancer Res. 4(6): 249-252.
Silverman J. et al. (2004) Genes Dev. 18(17): 2108-2119.
Nakada D. et al. (2003) Nucleic Acids Res. 31(6): 1715-1724.

## Published Papers

el at., 53BP1 loss suppresses the radiosensitizing effect of icotinib hydrochloride in colorectal cancer cells.In Int J Radiat Biol. On 2018 Apr by Huang A1, Yao J et al..PMID: 29388453, , (2018)

PMID:29388453

el at., Identification of signaling pathways mediating cell cycle arrest and apoptosis induced by Porphyromonas gingivalis in human trophoblasts. In Infect Immun on 2012 Aug

by Hiroaki Inaba , Masae Kuboniwa, et al..PMID: 22689813, , (2012)

PMID:22689813

el at., 53BP1 loss induces chemoresistance of colorectal cancer cells to 5-fluorouracil by inhibiting the ATMı ζ• HK2ı ζ• 53 pathway.In J Cancer Res Clin Oncol on 2017 Mar by Jing Yao, Ai Huang,et al..PMID: 27838786, , (2017)

PMID:27838786

el at., Deficiency of 53BP1 inhibits the radiosensitivity of colorectal cancer. In Int J Oncol on 2016 Oct by Yong Xiao, Xiumei Zheng,et al..PMID:27499037

, , (2016)

PMID:27499037

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