

## ATM(Ab-1981) Antibody

Catalog No: #21147

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

Orders: order@signalwayantibody.com

Support: tech@signalwayantibody.com

## Description

Product Name	ATM(Ab-1981) 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
Uniprot	Q13315
GeneID	472;
Concentration	1.0mg/ml
Formulation	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg <sup>2+</sup> and Ca <sup>2+</sup> ), 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.

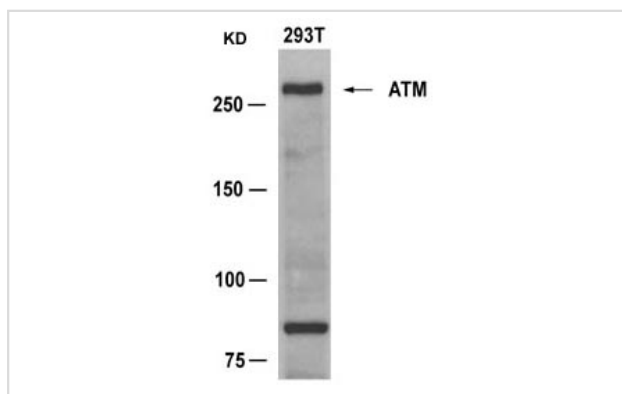
## Application Details

Predicted MW: 350kd

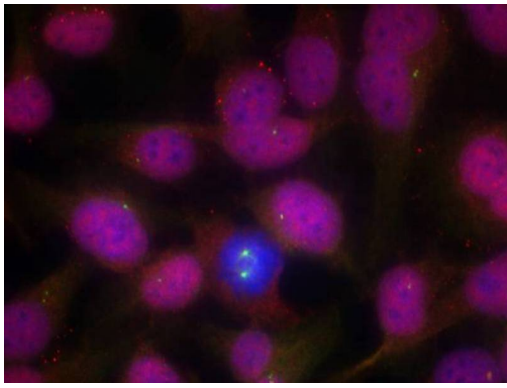
Western blotting: 1:500~1:1000

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.

Note: This product is for in vitro research use only