

#21147

ATM (Ab-1981) Antibody

Catalog: #21147-1 50µl **Orders:** order@signalwayantibody.com
#21147-2 100µl **Support:** tech@signalwayantibody.com
Storage: Store at -20°C/1 year **Web:** www.signalwayantibody.com



Application	Species Reactivity	Source	Molecular Wt.
WB IF	Human Mouse	Rabbit Polyclonal Ab	350KD

Description: Antibodies were produced by immunizing rabbits with synthetic peptide and KLH conjugates. Antibodies were purified by affinity-chromatography using epitope-specific peptide.

Specificity: The antibody detects endogenous level of total ATM protein.

Immunogen: Peptide sequence around aa.1979~1983 (E-G-S-Q-S) derived from Human ATM.

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.

Synonyms: Ataxia telangiectasia mutated homolog Ataxia telangiectasia mutated kinase ATM

Accession No.: Swiss-Prot#: Q13315 NCBI Gene#: 472
NCBI Protein#: NP_000042.3

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.

References:

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.

Citation:

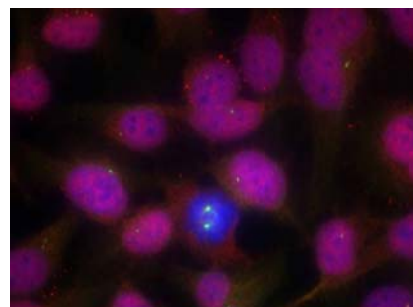
If you publish research using #21147 please [let us know](#).

Related Pathway: Cancer/Apoptosis, CellCycle, NF-kappa B, DNA damage/repair

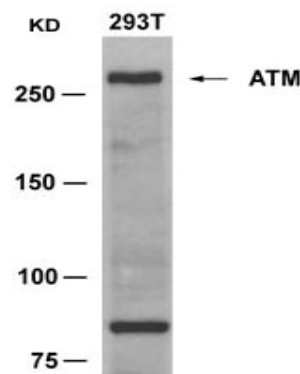
Note: For western blotting, incubate membrane with diluted antibody in 5% nonfat milk, 1X TBS, 0.1% Tween-20 at 4°C with gentle shaking, overnight.

Recommended Dilutions:

Western blotting 1:500~1:1000
Immunofluorescence 1:100~1:200



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



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