

ATM (Ab-1981) Antibody

#21147

Catalog Number: 21147-1, 21147-2

Amount: $50 \mu g/50 \mu 1$, $100 \mu g/100 \mu 1$

Swiss-Prot No.: Q13315

Form of Antibody: Rabbit IgG in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.

Storage/Stability: Store at $-20^{\circ}C/1$ year

Immunogen: The antiserum was produced against synthesized non-phosphopeptide derived from human ATM around the phosphorylation site of serine 1981 (E-G-S_P-Q-S).

Purification: The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.

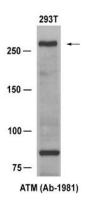
Specificity/Sensitivity: ATM (Ab-1981) Antibody detects endogenous levels of total ATM protein.

Reactivity: Human, Mouse

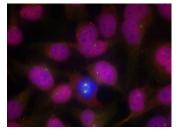
Applications:

Predicted MW: 350kd

WB: 1:500-1:1000 IF:1:100~1:200



Western blot analysis of extract from 293T cells, using ATM (Ab-1981) Antibody (#21147).



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

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.