#### **Product Datasheet**

# ATM(Phospho-Ser1981) Antibody

Catalog No: #11122

Package Size: #11122-1 50ul #11122-2 100ul



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

Product Name	ATM(Phospho-Ser1981) Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Antibodies were produced by immunizing rabbits with synthetic phosphopeptide and KLH conjugates.
	Antibodies were purified by affinity-chromatography using epitope-specific phosphopeptide. Non-phospho
	specific antibodies were removed by chromatogramphy using non-phosphopeptide.
Applications	WB IHC
Species Reactivity	Hu
Specificity	The antibody detects endogenous level of ATM only when phosphorylated at serine 1981.
mmunogen Type	Peptide-KLH
mmunogen Description	Peptide sequence around phosphorylation site of serine 1981 (E-G-S(p)-Q-S) derived from Human ATM.
Γarget Name	ATM
Modification	Phospho
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 Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.02

Store at -20°C for long term preservation (recommended). Store at 4°C for short term use.

sodium azide and 50% glycerol.

### **Application Details**

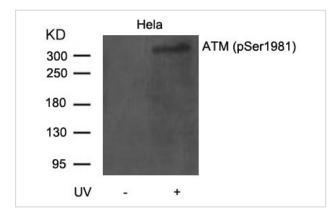
Predicted MW: 350kd

Western blotting: 1:500~1:1000

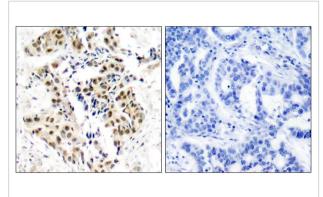
Immunohistochemistry: 1:50~1:100

## **Images**

Storage



Western blot analysis of extracts from Hela cells untreated or treated with UV using ATM(Phospho-Ser1981) Antibody #11122



Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using ATM(Phospho-Ser1981) Antibody #11122(left) or the same antibody preincubated with blocking peptide(right).

#### 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