

#11122

ATM (Phospho-Ser1981) Antibody

Catalog: #11122-1 50µl Orders: order@signalwayantibody.com
#11122-2 100µl Support: tech@signalwayantibody.com
Storage: Store at -20°C/1 year Web: www.signalwayantibody.com



Application	Species Reactivity	Source	Molecular Wt.
IHC	Human Mouse	Rabbit Polyconal Ab	350KD

Description: 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 chromatography using non-phosphopeptide.

Specificity: The antibody detects endogenous level of ATM only when phosphorylated at serine 1981.

Immunogen: Peptide sequence around phosphorylation site of serine 1981 (E-G-S(p)-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.

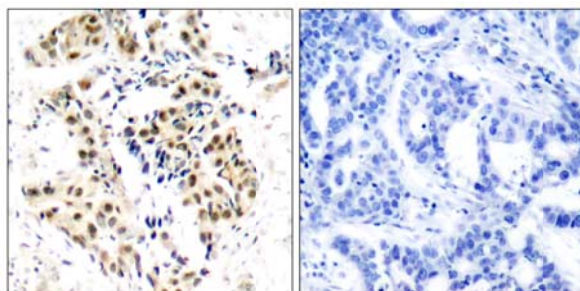
Synonyms: Ataxia telangiectasia mutated homolog Ataxia telangiectasia mutated kinase ATM

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.



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).

Citation:

Bin Kang ,Ruifang Guo,Xiao-hui Tian , et al. Expression status of ataxia telangiectasia mutated gene coorelated with Prognosis in advanced gastric cancer.Mutation Research, 638, 17-25.(2008)

J Leemput, C Masson, K Bigot , ATM localization and gene expression in the adult mouse eye.Molecular Vision 15, 393–416

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

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.*