ATM(Phospho-Ser1981) Antibody

Catalog No: #11122

Package Size: #11122-1 50ul #11122-2 100ul #11122-4 25ul

Overview

Product Name	ATM(Phospho-Ser1981) Antibody
Host Species	Rabbit
Clonality	Polyclonal
Applications	WB IHC
Species Reactivity	Human Mouse
Immunogen Type	Peptide-KLH
Target Name	ATM
Modification	Phospho-Ser1981
Alternative Names	Ataxia telangiectasia mutated homolog; Ataxia telangiectasia mutated; kinase ATM

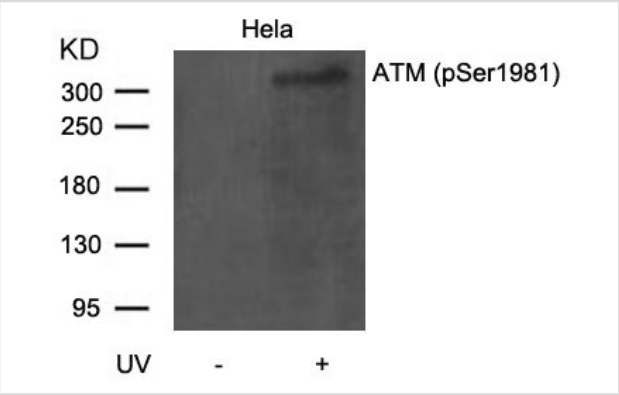
Application Details

Predicted MW: 350kd

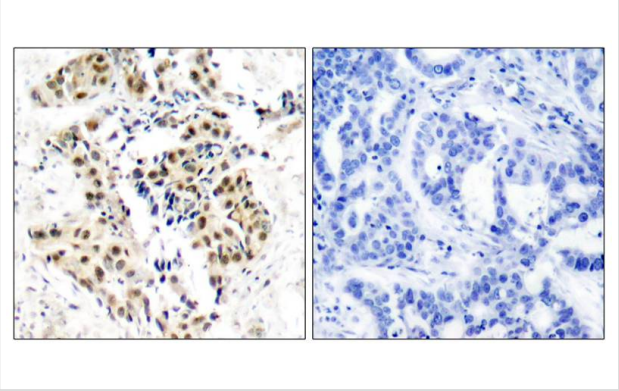
Western blotting: 1:500~1:1000

Immunohistochemistry: 1:50~1:100

Images



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).

Descriptions

Immunogen	Peptide sequence around phosphorylation site of serine 1981 (E-G-S(p)-Q-S) derived from Human ATM.
Specificity	The antibody detects endogenous level of ATM only when phosphorylated at serine 1981.
Purifiction	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.
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.
Storage	Store at -20°C for long term preservation (recommended). Store at 4°C for short term use.
Accession NO.	Swiss-Prot: Q13315NCBI Protein: NP_000042.3

Related Information

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.

Published Papers

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

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Dashayini Mahalingam, Ling L. Tay, Wei H. Tan el at., Mutant telomerase RNAs induce DNA damage and apoptosis via the TRF2-ATM pathway in telomerase-overexpressing primary fibroblasts. , FEBS Journal, 278:3724B¨C3738(2011)

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Hiroaki Inaba, Masae Kuboniwa, Hideyuki Sugita el at., Identification of Signaling Pathways Mediating Cell Cycle Arrest and Apoptosis Induced by Porphyromonas gingivalis in Human Trophoblasts, Infect., Infect Immun, 80(8):2847-2857(2012)

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J Leemput, C Masson, K Bigot el at., ATM localization and gene expression in the adult mouse eye., Molecular Vision, 15: 393B¨C416(2009)

PMID:19234633