

35-1118: Polyclonal Antibody to ATM (Phospho-Ser1981)

Clonality :	Polyclonal
Application :	WB,IHC
Reactivity :	Human
Gene :	ATM
Gene ID :	472
Uniprot ID :	Q13315
Format :	Purified
Alternative Name :	Ataxia telangiectasia mutated homolog, Ataxia telangiectasia mutated, kinase ATM
Isotype :	Rabbit IgG
Immunogen Information :	Peptide sequence around phosphorylation site of serine 1981 (E-G-S(p)-Q-S) derived from Human ATM.

Description

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.

Product Info

Amount :	50 µl / 100 µl
Content :	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg ²⁺ and Ca ²⁺), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage condition :	Store the antibody at 4°C, stable for 6 months. For long-term storage, store at -20°C. Avoid repeated freeze and thaw cycles.

Application Note

Predicted MW: 350kd, Western blotting: 1:500~1:1000, Immunohistochemistry: 1:50~1:100

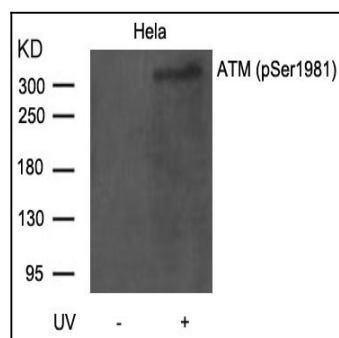


Figure 1: Western blot analysis of extracts from HeLa cells untreated or treated with UV using ATM(Phospho-Ser1981) Antibody 35-1118

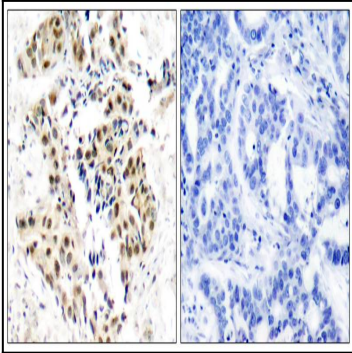


Figure 2: Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using ATM(Phospho-Ser1981) Antibody 35-1118 (left) or the same antibody preincubated with blocking peptide(right).