

Product datasheet for **TA389056**

Phospho-ATM (pSer1981) Mouse Antibody [Clone ID: M366]

Product data:

Product Type:	Primary Antibodies
Clone Name:	M366
Applications:	ICC, IP, WB
Recommended Dilution:	WB: 1:1000 ICC: 1:200
Reactivity:	Human, Rat, Mouse
Host:	Mouse
Isotype:	IgG1
Immunogen:	Clone M366 was generated from a phospho-peptide that included amino acids surrounding Serine 1981 in human ATM. This sequence has high homology to the conserved site in rat and mouse ATM.
Specificity:	This antibody detects a 370 kDa* protein corresponding to the molecular mass of ATM on SDS-PAGE immunoblots of calyculin A treated human A431 and Jurkat Cells, but is not observed in control cells.
Formulation:	PBS + 1 mg/ml BSA, 0.05% NaN ₃ and 50% glycerol
Concentration:	lot specific
Purification:	Protein A Purified
Conjugation:	Unconjugated
Storage:	Storage at -20°C is recommended, as aliquots may be taken without freeze/thawing due to presence of 50% glycerol. Stable for at least 1 year at -20°C.
Stability:	After date of receipt, stable for at least 1 year at -20°C.
Predicted Protein Size:	370
Database Link:	Q13315



[View online »](#)

Background:

Ataxia telangiectasia mutated kinase (ATM) is a serine/threonine kinase that regulates cell cycle checkpoints and DNA repair. Mutations of ATM cause a spectrum of defects ranging from neurodegeneration to cancer predisposition. Activation of ATM after DNA damage involves Cdk5 mediated phosphorylation of Ser-794 followed by autophosphorylation at Ser-1891. Active ATM kinase regulates a number of proteins involved in cell cycle checkpoint control, apoptosis and DNA repair. The Cdk5-ATM pathway regulates phosphorylation and function of the ATM targets p53 and H2AX in postmitotic neurons. Other known substrates of ATM include Chk2, Chk1, CtIP, 4E-BP1, BRCA1, RPA3, SMC1, FANCD2, Rad17, Artemis, Nbs1, and the I-2 regulatory subunit of PP1. Thus, activation of Cdk5 by DNA damage may be an important initiator of ATM-dependent regulation of cell cycle checkpoints.

Note:

Protein G purified tissue culture supernatant.