

## Basic Information

Product Name	Anti-ATM Antibody
Gene Name	ATM
Source	Rabbit
Isotype	IgG
Species Reactivity	human
Tested Application	WB
Contents	500 ug/ml antibody with PBS , 0.02% Na <sub>3</sub> N , 1 mg BSA and 50% glycerol.
Immunogen	E.coli-derived human ATM recombinant protein (Position: D2870-V3056). Human ATM shares 95% amino acid (aa) sequence identity with mouse ATM.
concentration	500 ug/ml
Purification	Immunogen affinity purified.
Observed MW	350KD
Dilution Ratios	Western blot(WB):1:500-2000

## Storage

12 months from date of receipt, -20°C as supplied. 6 months 2 to 8°C after reconstitution. Avoid repeated freezing and thawing.

## Background Information

ATM(ataxia telangiectasia mutated), also known as TEL1 or Telo1, is a serine/threonine protein kinase that is recruited and activated by DNA double-strand breaks. The ATM protein is a member of the phosphatidylinositol 3-kinase family of proteins that respond to DNA damage by phosphorylating key substrates involved in DNA repair and/or cell cycle control. The ATM gene is mapped to chromosome 11q22.3. ATM has an essential role in the reconstitutive capacity of hematopoietic stem cells but is not as important for the proliferation or differentiation of progenitors in a telomere-independent manner. ATM functions directly in the repair of chromosomal DNA double-stranded breaks by maintaining DNA ends in repair complexes generated during lymphocyte gene assembly.

## Selected Validation Data

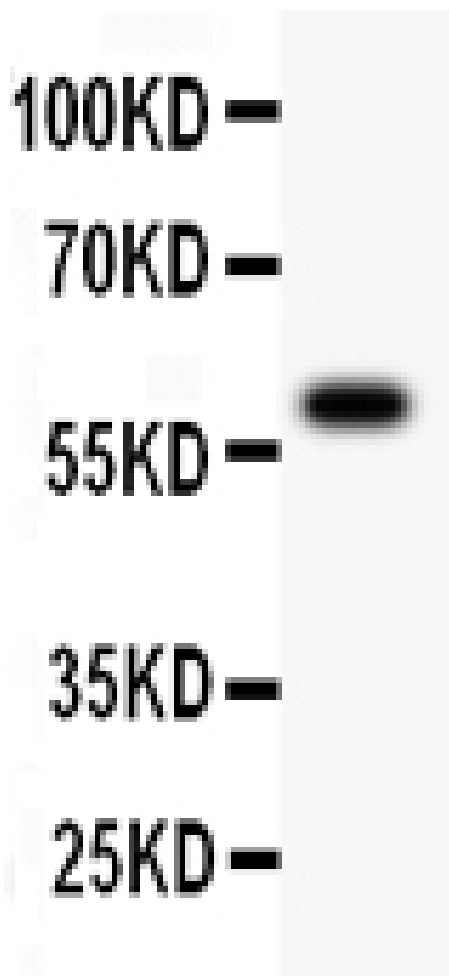


Figure 1. Western blot analysis of Anti-ATM antibody (PB0100). The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: Recombinant human ATM protein, Use rabbit Anti-ATM 1:1000, probed with a goat Anti-rabbit IgG-HRP secondary antibody. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002). A specific band was detected for ATM at approximately 60KD. The expected band size for ATM is at 60KD.