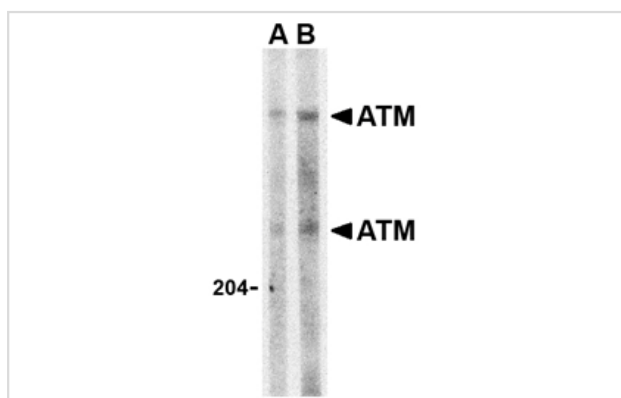


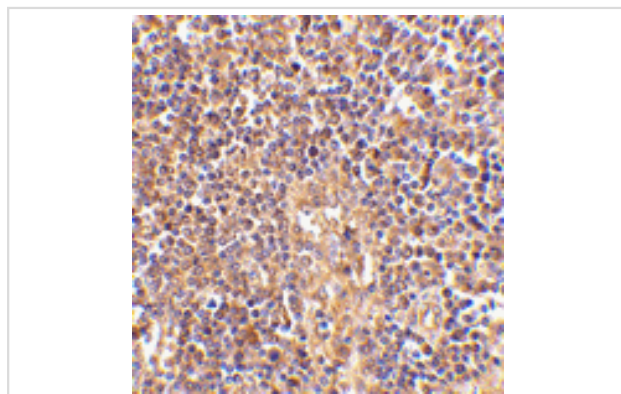
Description

Product Name	ATM Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Affinity chromatography purified via peptide column
Applications	ELISA WB IHC
Species Reactivity	Hu
Immunogen Type	Peptide
Immunogen Description	Raised against a peptide corresponding to 14 amino acids near the carboxy terminus of human ATM.
Target Name	ATM
Other Names	mutated in Ataxia-Telangiectasia
Accession No.	Swiss-Prot:Q13315Gene ID:472
Uniprot	Q13315
GeneID	472;
Concentration	1mg/ml
Formulation	Supplied in PBS containing 0.02% sodium azide.
Storage	Can be stored at -20°C, stable for one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

Images



Western blot analysis of ATM in Daudi whole cell lysate with ATM antibody at (A) 1 and (B) 2 ug/mL.



Immunohistochemistry of ATM in human lymph node tissue with ATM antibody at 2.5 ug/mL.

Background

DNA double strand breaks represent a major threat to an organism's genome. Eukaryotic cells have developed mechanisms that sense the presence of this damage and initiate suitable responses that can include DNA repair, cell cycle delay, and programmed cell death. The ATM (mutated in Ataxia-Telangiectasia) protein kinase is activated following the formation of DNA double strand breaks, phosphorylating p53 and another kinase CHK2. This initiates a signaling cascade leading to the phosphorylation and inhibition of Cdc25, ultimately preventing cell cycle progression. In some cell types, such as the hematopoietic system, this leads to apoptosis instead of cell cycle arrest. Multiple isoforms of ATM are known to exist.

Note: This product is for in vitro research use only