

**ATMIN Antibody**  
Catalog # ASC11793**Specification****ATMIN Antibody - Product Information**

Application	WB, ICC, IF
Primary Accession	<a href="#">O43313</a>
Other Accession	<a href="#">NP_056066</a> , <a href="#">54792092</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	Predicted: 73, 79, 91 kDa

Application Notes	<b>Observed: 72 kDa KDa</b> ATMIN antibody can be used for detection of ATMIN by Western blot at 1 - 2 µg/ml. Antibody can also be used for Immunocytochemistry at 5 µg/mL. For Immunofluorescence start at 2.5 µg/mL.
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**ATMIN Antibody - Additional Information**

Gene ID 23300

**Target/Specificity**

ATMIN; ATMIN antibody is human, mouse and rat reactive. At least three isoforms of ATMIN are known to exist.

**Reconstitution & Storage**

ATMIN antibody can be stored at 4°C for three months and -20°C, stable for up to one year.

**Precautions**

ATMIN Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**ATMIN Antibody - Protein Information**

Name ATMIN

Synonyms KIAA0431, ZNF822

**Function**

Transcription factor. Plays a crucial role in cell survival and RAD51 foci formation in response to methylating DNA damage. Involved in regulating the activity of ATM in the absence of DNA damage. May play a role in stabilizing ATM. Binds to the DYNLL1 promoter and activates its transcription.

**Cellular Location**

Nucleus. Note=Nuclear, in discrete foci during G1 phase

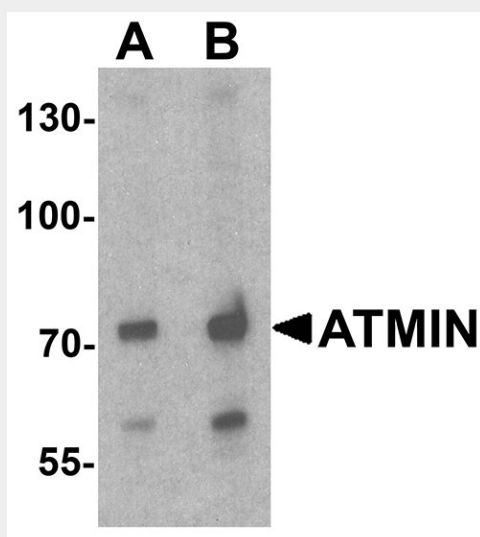
**Tissue Location**

Ubiquitously expressed in normal tissues and cancer cell lines with highest levels in placenta and skeletal muscle

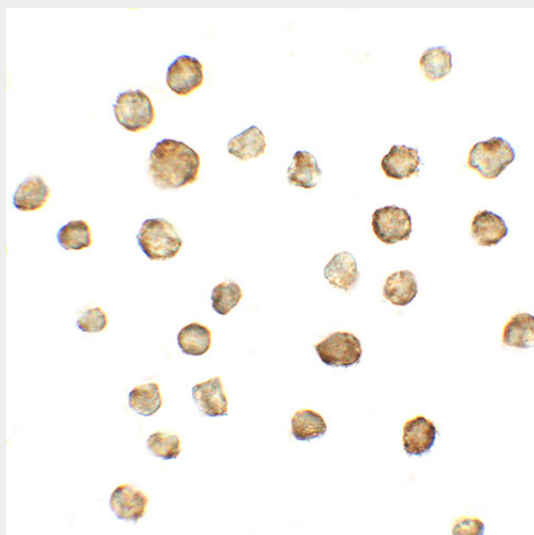
**ATMIN Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

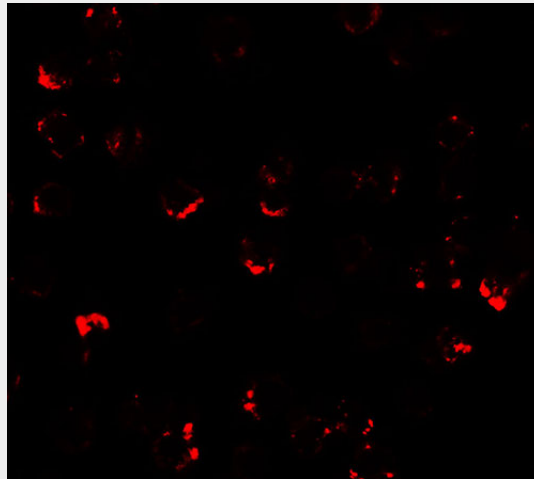
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**ATMIN Antibody - Images**

Western blot analysis of ATMIN in 293 cell lysate with ATMIN antibody at (A) 1 and (B) 2 µg/ml.



Immunocytochemistry of ATMIN in A431 cells with ATMIN antibody at 5 µg/mL.



Immunofluorescence of ATMIN in A431 cells with ATMIN antibody at 2.5 µg/mL.

### **ATMIN Antibody - Background**

The ATM/ATR-substrate CHK2-interacting zinc finger protein (ATMIN), also known as ASCIZ, forms DNA damage-induced nuclear foci that contain the DNA repair protein Rad51 (1). ATMIN is also thought to be involved in embryonic development, as an absence of ATMIN causes late-embryonic lethality in mice with a range of organ development defects (2). It also activates the transcription DYNLL1, a light chain of the dynein motor complex and sequence-specific regulator of protein dimerization of numerous targets. DYNLL1 can bind to and inhibit the transcription activation domain of ATMIN, forming a simple dynamic feedback loop for DYNLL1 expression (3).

### **ATMIN Antibody - References**

McNees CJ, Conlan LA, Tennis N, et al. ASCIZ regulates lesion-specific Rad51 focus formation and apoptosis after methylating DNA damage. *EMBO J.* 2005; 24:2447-57.  
Jurado S, Smyth I, van Denderen B, et al. Dual functions of ASCIZ in the DNA base damage response and pulmonary organogenesis. *PLoS Genet.* 2010; 6:e1001170.  
Jurado S, Conlan LA, Baker EK, et al. ATM substrate Chk2-interacting Zn<sup>2+</sup> finger (ASCIZ) is a bi-functional transcriptional activator and feedback sensor in the regulation of Dynein Light Chain (DYNLL1) expression. *J. Biol. Chem.* 2012; 287:3156-64.