Product Datasheet

ATM [p Ser1981] Antibody (10H11.E12)
NB100-307

Unit Size: 0.1 ml

Aliquot and store at -20C or -80C. Avoid freeze-thaw cycles.

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Reviews: 1 Publications: 5

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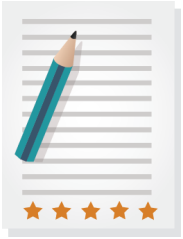

NB100-307

ATM [p Ser1981] Antibody (10H11.E12)

Product Information	
Unit Size	0.1 ml
Concentration	This product is unpurified. The exact concentration of antibody is not quantifiable.
Storage	Aliquot and store at -20C or -80C. Avoid freeze-thaw cycles.
Clonality	Monoclonal
Clone	10H11.E12
Preservative	0.1% Sodium Azide
Isotype	IgG1 Kappa
Purity	Unpurified
Buffer	Ascites
Target Molecular Weight	370 kDa

Product Description	
Host	Mouse
Gene ID	472
Gene Symbol	ATM
Species	Human, Mouse, Rat
Reactivity Notes	Human, mouse and rat.
Immunogen	Synthetic peptide made to a region surrounding the phosphorylated Serine 1981 of human ATM. [UniProt# Q13315]

Product Application Details	
Applications	Western Blot, Immunocytochemistry/ Immunofluorescence
Recommended Dilutions	Western Blot 1:1000, Immunocytochemistry/ Immunofluorescence 1:500
Application Notes	This ATM [p Ser1981] (10H11.E12) antibody is useful for Immunocytochemistry/Immunofluorescence and Western blot, where a single band is seen at ~370 kDa. The observed molecular weight of the protein may vary from the listed predicted molecular weight due to post translational modifications, post translation cleavages, relative charges, and other experimental factors.

Publications

Cao K, Riley JS, Heilig R et al. Mitochondrial dynamics regulate genome stability via control of caspase-dependent DNA damage Developmental cell 2022-04-14 [PMID: 35447090] (ICC/IF, Human)

Tesson M, Anselmi G, Bell C, Mairs R. Cell cycle specific radiosensitisation by the disulfiram and copper complex Oncotarget 2017-09-12 [PMID: 29029481] (WB, Human)

Carruthers R, Ahmed SU, Strathdee K et al. Abrogation of radioresistance in glioblastoma stem-like cells by inhibition of ATM kinase. Molecular Oncology. 2014-08-24 [PMID: 25205037]

Chu, PC et al. Silencing of p29 Affects DNA Damage Responses with UV Irradiation. Cancer Res. 66: 8484-8491. 2006-01-01 [PMID: 16951160]

Bartkova J, Bakkenist CJ, Rajpert-De Meyts E et al. ATM activation in normal human tissues and testicular cancer. Cell Cycle 2005-06-01 [PMID: 15846060]

Procedures

Western Blot Protocol for ATM Antibody (NB100-307)
1) Resolve protein samples on a 6% SDS-PAGE gel at 185V for ~1.5 hours.
2) Transfer to PVDF membranes at 25V for ~1.5 hours.
3) Block the membrane with TBST+BSA and goat serum for 1 hour at RT.
4) Dilute purified primary antibody (NB100-307) to 1:1000 in blocking buffer.
5) Incubate membrane overnight at 4 degrees Celcius in diluted purified anti-ATM.
6) Wash 3 times ten minutes on a shaker.
7) Incubate membranes with HRP conjugated anti-mouse IgG for 1 hour (RT), diluted in blocking buffer.
8) Wash 3 times ten minutes on a shaker.
9) Add ECL reagent, as per kit directions, and expose for 1-5 seconds.

*The above information is only intended as a guide. The researcher should determine what protocol best meets their needs. Please follow safe laboratory procedures.

Immunocytochemistry/Immunofluorescence Protocol for ATM Antibody (NB100-307)
Culture cells to appropriate density in 35 mm culture dishes or 6-well plates.

1. Remove culture medium and add 10% formalin to the dish. Fix at room temperature for 30 minutes.
2. Remove the formalin and add ice cold methanol. Incubate for 5-10 minutes.
3. Remove methanol and add washing solution (i.e. PBS). Be sure to not let the specimen dry out. Wash three times for 10 minutes.
4. To block nonspecific antibody binding incubate in 10% normal goat serum from 1 hour to overnight at room temperature.
5. Add primary antibody at appropriate dilution and incubate at room temperature from 2 hours to overnight at room temperature.
6. Remove primary antibody and replace with washing solution. Wash three times for 10 minutes.
7. Add secondary antibody at appropriate dilution. Incubate for 1 hour at room temperature.
8. Remove antibody and replace with wash solution, then wash for 10 minutes. Add Hoechst 33258 to wash solution at 1:25,0000 and incubate for 10 minutes. Wash a third time for 10 minutes.
9. Cells can be viewed directly after washing. The plates can also be stored in PBS containing Azide covered in Parafilm (TM). Cells can also be cover-slipped using Fluoromount, with appropriate sealing.

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Limitations
This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

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