bsm-54103R

[Primary Antibody]

phospho-ATM (Ser1981) Recombinant Rabbit mAb

Bioss ANTIBODIES

www.bioss.com.cn

sales@bioss.com.cn

techsupport@bioss.com.cn

400-901-9800

— DATASHEET —

Host: Rabbit

Clonality: Recombinant

GeneID: 472

Target: phospho-ATM (Ser1981)

Immunogen: A synthesized peptide derived from human ATM around the phosphorylation site of S1981: EG-pS-QS.

Purification: affinity purified by Protein A

Concentration: 1mg/ml

**Storage:** 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
Shipped at 4℃. Store at -20℃ for one year. Avoid repeated freeze/thaw cycles.

Background: ATM is a 370 kDa nuclear phosphoprotein involved in the autosomal recessive disease Ataxia Telangiectasia (AT). ATM belongs to a novel family of proteins associated with cell cycle regulation, apoptosis, and response to DNA damage repair (DNA damage caused by such things as ionizing irradiation activates ATM kinase). The C terminal region has extensive homology to the catalytic domains of Phosphatidylinositol 3 kinases (PI3 kinases).

Isotype: IgG

CloneNo.: 3F10

SWISS: Q13315

Applications: **WB** (1:500-2000)
IHC-P (1:50-200)
IHC-F (1:50-200)
IF (1:50-200)
ICC/IF (1:50-200)

Reactivity: Human

Predicted MW.: 370 kDa

Subcellular Location: Cytoplasm ,Nucleus

— VALIDATION IMAGES —
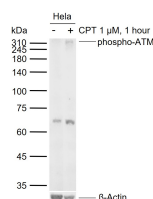
Sample: Lane 1: Normal Human HeLa cell lysates Lane 2: HeLa cell treated with 1 μM camptothecin (CPT) for 1 hour Primary: Anti-phospho-ATM (Ser1981) (bsm-54103R) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 370 kDa Observed band size: 65 kDa
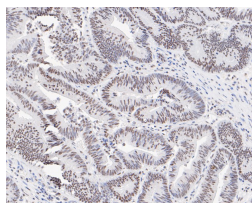

Paraformaldehyde-fixed, paraffin embedded (human colon carcinoma); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (phospho-ATM (Ser1981)) Monoclonal Antibody, Unconjugated (bsm-54103R) at 1:50 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.
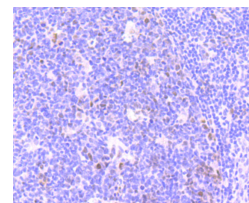
Paraformaldehyde-fixed, paraffin embedded (human tonsil); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (phospho-ATM (Ser1981)) Monoclonal Antibody, Unconjugated (bsm-54103R) at 1:50 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.
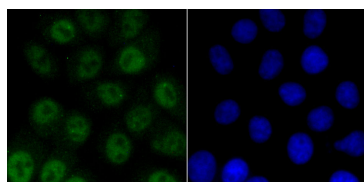
HepG2 cell; 4% Paraformaldehyde-fixed; Triton X-100 at room temperature for 20 min; Blocking buffer (normal goat serum, C-0005) at 37°C for 20 min; Antibody incubation with (ATM(phospho S1981)) monoclonal Antibody, Unconjugated (bsm-54103R) 1:50, 90 minutes at 37°C; followed by a conjugated Goat Anti-Rabbit IgG antibody
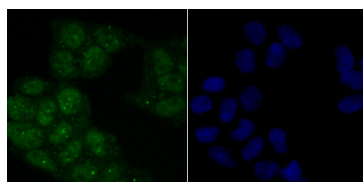
Hela cell; 4% Paraformaldehyde-fixed; Triton X-100 at room temperature for 20 min; Blocking buffer (normal goat serum, C-0005) at 37°C for 20 min; Antibody incubation with (ATM(phospho S1981)) monoclonal Antibody, Unconjugated (bsm-54103R) 1:50, 90 minutes at 37°C; followed by a conjugated Goat Anti-Rabbit IgG antibody

Important Note: This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

at 37°C for 90 minutes, DAPI (blue, C02-04002) was used to stain the cell nuclei.

— SELECTED CITATIONS

- **[IF=11.4]** Yuwen Xie. et al. Targeting ATM enhances radiation sensitivity of colorectal cancer by Potentiating radiation-induced cell death and antitumor immunity. J ADV RES. 2024 Dec;: WB ;Mouse,Human. 39708961
- **[IF=7.5]** Baochen Zhou. et al. Quercetin inhibits DNA damage responses to induce apoptosis via SIRT5/PI3K/AKT pathway in non-small cell lung cancer. BIOMED PHARMACOTHER. 2023 Sep;165:115071 WB ;Human. 37390710