

phospho-ATM (Ser1981) Recombinant Rabbit mAb

Catalog Number: bsm-54103R

Target Protein: phospho-ATM (Ser1981)

Concentration: 1mg/ml

Form: Liquid

Host: Rabbit

Clonality: Recombinant

Clone No.: 3F10

Isotype: IgG

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

Entrez Gene: 472

Swiss Prot: Q13315

Source: KLH conjugated Synthesised phosphopeptide derived from human ATM around the phosphorylation site of Ser1981: EG(p-S)Q.

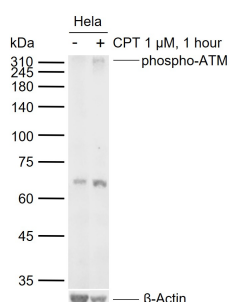
Purification: affinity purified by Protein A

Storage: 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

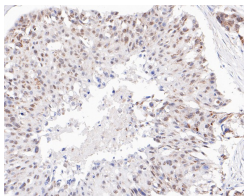
Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

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).

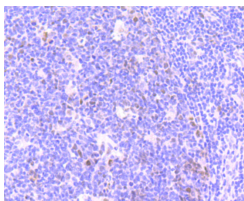
VALIDATION IMAGES



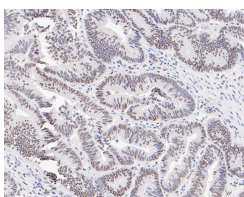
Sample: Lane 1: Normal Human HeLa cell lysates Lane 2: HeLa cell treated with 1 μM camptothecin (CPT) for 1 hour Primary: Anti-phospho-ATM (Ser1981) (bsm-54103R) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 370 kDa Observed band size: 65 kDa



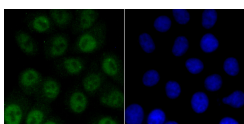
Paraformaldehyde-fixed, paraffin embedded (human breast carcinoma); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (phospho-ATM (Ser1981)) Monoclonal Antibody, Unconjugated (bsm-54103R) at 1:50 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



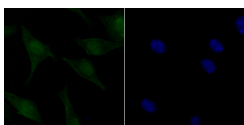
Paraformaldehyde-fixed, paraffin embedded (human tonsil); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (phospho-ATM (Ser1981)) Monoclonal Antibody, Unconjugated (bsm-54103R) at 1:50 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



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



SH-SY5Y 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 at 37°C for 90 minutes, DAPI (blue, C02-04002) was used to stain the cell nuclei.

PRODUCT SPECIFIC PUBLICATIONS

[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