bs-5677R **[Primary Antibody]**

phospho-RAD51 (Thr309) Rabbit pAb

www.bioss.com.cn
sales@bioss.com.cn
techsupport@bioss.com.cn
400-901-9800

DATASHEET

Host: Rabbit **Isotype:** IgG

Clonality: Polyclonal

GeneID: 5888 **SWISS:** Q06609

Target: RAD51 (Thr309)

Immunogen: KLH conjugated Synthesised phosphopeptide derived from human RAD51 around the phosphorylation site of Thr309: GE(p-T)RI.

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

Background: The protein encoded by this gene is a member of the RAD51 protein family. RAD51 family members are highly similar to bacterial RecA and Saccharomyces cerevisiae Rad51, and are known to be involved in the homologous recombination and repair of DNA. This protein can interact with the ssDNA-binding protein RPA and RAD52, and it is thought to play roles in homologous pairing and strand transfer of DNA. This protein is also found to interact with BRCA1 and BRCA2, which may be important for the cellular response to DNA damage. BRCA2 is shown to regulate both the intracellular localization and DNA-binding ability of this protein. Loss of these controls following BRCA2 inactivation may be a key event leading to genomic instability and tumorigenesis. Two alternatively spliced transcript variants of this gene, which encode distinct proteins, have been reported. Transcript variants utilizing alternative polyA signals exist.

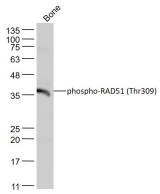
Applications: **WB** (1:500-2000)
IHC-P (1:100-500)
IHC-F (1:100-500)
IF (1:100-500)
Flow-Cyt (1ug/Test)
ICC/IF (1:100)

Reactivity: Human, Mouse (predicted: Rat, Rabbit, Pig, Sheep, Cow, Chicken, Dog)

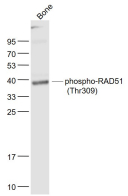
Predicted MW.: 37 kDa

Subcellular Location: Cytoplasm ,Nucleus

VALIDATION IMAGES



Sample: Bone (Mouse) Lysate at 40 ug Primary: Anti-phospho-RAD51 (Thr309) (bs-5677R) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 37 kD Observed band size: 37 kD



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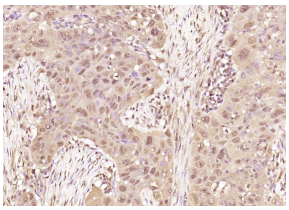
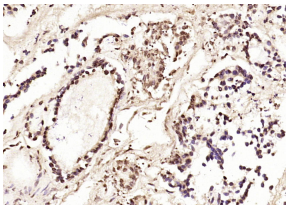
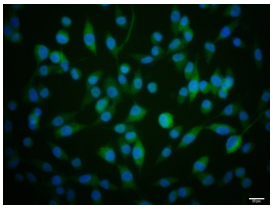
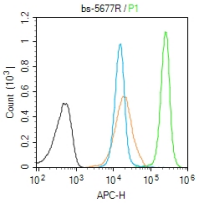


Paraformaldehyde-fixed, paraffin embedded (human laryngeal carcinoma); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (phospho-RAD51 (Thr309)) Polyclonal Antibody, Unconjugated (bs-5677R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.







Paraformaldehyde-fixed, paraffin embedded (human gastric 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-RAD51 (Thr309)) Polyclonal Antibody, Unconjugated (bs-5677R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.

NIH/3T3 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 (phospho-RAD51 (Thr309)) polyclonal Antibody, Unconjugated (bs-5677R) 1:100, 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.

Blank control (Black line):Molt4 (Black). Primary Antibody (green line): Rabbit Anti-phospho-RAD51(Thr309) antibody (bs-5677R) Dilution: 1µg /10^6 cells; Isotype Control Antibody (orange line): Rabbit IgG . Secondary Antibody (white blue line): Goat anti-rabbit IgG-AF647 Dilution: 1µg /test. Protocol The cells were fixed with 4% PFA (10min at room temperature)and then permeabilized with 90% ice-cold methanol for 20 min at room temperature. The cells were then incubated in 5%BSA to block non-specific protein-protein interactions for 30 min at room temperature .Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.

SELECTED CITATIONS

- **[IF=21.3]** Grigorash Bogdan B.. et al. p16High senescence restricts cellular plasticity during somatic cell reprogramming. NAT CELL BIOL. 2023 Aug;25(9):1265-1278 IF ;Mouse. 37652981
- **[IF=6.656]** Leiyang Guo. et al. Morusinol extracted from Morus alba induces cell cycle arrest and apoptosis via inhibition of DNA damage response in melanoma by CHK1 degradation through the ubiquitin-proteasome pathway. PHYTOMEDICINE. 2023 Jun;114:154765 WB ;Human. 37004403