

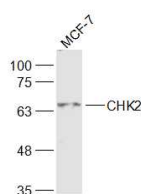
**bs-1391R****[ Primary Antibody ]****Bioss**  
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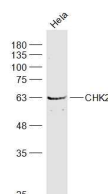
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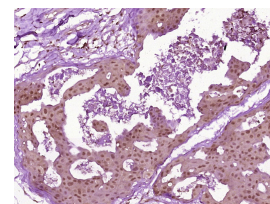
400-901-9800

**CHEK2 Rabbit pAb****— DATASHEET —****Host:** Rabbit**Isotype:** IgG**Clonality:** Polyclonal**GeneID:** 11200**SWISS:** O96017**Target:** CHEK2**Immunogen:** KLH conjugated synthetic peptide derived from human CHEK2: 101-250/586.**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:** In response to DNA damage and replication blocks, cell cycle progression is halted through the control of critical cell cycle regulators. The protein encoded by this gene is a cell cycle checkpoint regulator and putative tumor suppressor. It contains a forkhead-associated protein interaction domain essential for activation in response to DNA damage and is rapidly phosphorylated in response to replication blocks and DNA damage. When activated, the encoded protein is known to inhibit CDC25C phosphatase, preventing entry into mitosis, and has been shown to stabilize the tumor suppressor protein p53, leading to cell cycle arrest in G1. In addition, this protein interacts with and phosphorylates BRCA1, allowing BRCA1 to restore survival after DNA damage. Mutations in this gene have been linked with Li-Fraumeni syndrome, a highly penetrant familial cancer phenotype usually associated with inherited mutations in TP53. Also, mutations in this gene are thought to confer a predisposition to sarcomas, breast cancer, and brain tumors. This nuclear protein is a member of the CDS1 subfamily of serine/threonine protein kinases. Several transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Apr 2012]**Applications:** WB (1:500-2000)**IHC-P** (1:100-500)**IHC-F** (1:100-500)**IF** (1:100-500)**Flow-Cyt** (1ug/Tes)**Reactivity:** Human (predicted: Mouse, Rat, Rabbit, Cow, Dog, Horse)**Predicted MW.:** 65 kDa**Subcellular Location:** Nucleus**— VALIDATION IMAGES —**

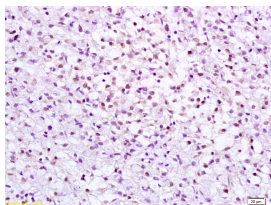
Sample: MCF-7(Human) Cell Lysate at 30 ug  
 Primary: Anti-CHEK2 (bs-1391R) at 1/1000 dilution  
 Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 65 kD  
 Observed band size: 65 kD



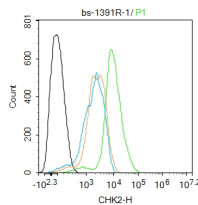
Sample: HeLa(Human) Cell Lysate at 30 ug  
 Primary: Anti-CHEK2 (bs-1391R) at 1/1000 dilution  
 Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 65 kD  
 Observed band size: 65 kD



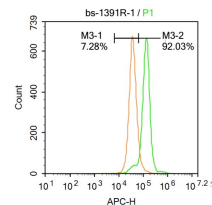
Paraformaldehyde-fixed, paraffin embedded (Human breast carcinoma); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (CHEK2) Polyclonal Antibody, Unconjugated (bs-1391R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Tissue/cell: human gastric carcinoma; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum, C-0005) at 37°C for 20 min; Incubation: Anti-CHK2 Polyclonal Antibody, Unconjugated(bs-1391R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Blank control: A431. Primary Antibody (green line): Rabbit Anti-CHK2 antibody (bs-1391R) Dilution: 1 $\mu$ g/Test; Secondary Antibody : Goat anti-rabbit IgG-FITC Dilution: 0.5 $\mu$ g/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 -20°C.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.



Blank control: A431. Primary Antibody (green line): Rabbit Anti-CHK2 antibody (bs-1391R) Dilution: 1 $\mu$ g /10<sup>6</sup> cells; Isotype Control Antibody (orange line): Rabbit IgG . Secondary Antibody : Goat anti-rabbit IgG-AF647 Dilution: 1 $\mu$ g /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 -20°C. 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 —

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- **[IF=3.98]** Wei, Jialiu, et al. "Endosulfan induces cell dysfunction through cycle arrest resulting from DNA damage and DNA damage response signaling pathways." Science of The Total Environment 589 (2017): 97-106. WB ;="Human". 28273598
- **[IF=2.74]** Liu, Jianhui, et al. "Silica nanoparticle exposure inducing granulosa cell apoptosis and follicular atresia in female Balb/c mice." Environmental Science and Pollution Research (2017): 1-12. WB ;="Mouse". 29151191
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