

Anti-CHEK2 Antibody [PCRP-CHEK2-1A4] - BSA and Azide free (A278128)

Specifications:

Name: Anti-CHEK2 Antibody [PCRP-CHEK2-1A4] - BSA and Azide free

Description: Mouse monoclonal [PCRP-CHEK2-1A4] antibody to CHEK2.

Specificity: This antibody recognizes a serine/threonine protein kinase that is a required check-point to

mediate cell cycle arrest, activation of DNA repair and apoptosis. 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. Also, 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.

Mutations in this gene are thought to confer a predisposition to sarcomas, breast cancer,

and brain tumors.

Applications: IP, Flow Cytometry, WB, IF

Recommended Dilutions: IP: 1-2μg / 100-500μg proteins, Flow Cytometry: 1-2 μg/million cells, WB: 1-2 μg/ml, IF: 1-2

μg/ml

Reactivity: Human

Cross Reactivity: This antibody is predicted to cross react with Mouse and Rat.

Immunogen: Recombinant fragment corresponding to the protein domain of human CHEK2.

Host: Mouse

Clonality: Monoclonal

Clone ID: PCRP-CHEK2-1A4

Isotype: IgG2b

Conjugate: Unconjugated

Purification: Protein A/G chromatography.

Concentration: 1 mg/ml

Product Form: Liquid

Formulation: Supplied in 10mM Phosphate Buffered Saline; without Sodium Azide and carrier free.



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Specifications continued:

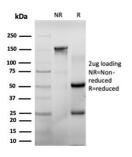
Storage: Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

General Notes: This monoclonal antibody is also available in a different formulation with BSA and Sodium

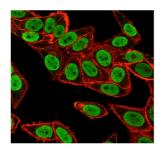
Azide - Anti-CHEK2 Antibody [PCRP-CHEK2-1A4] (A277540).

Disclaimer: This product is for research use only. It is not intended for diagnostic or therapeutic use.

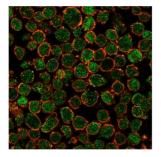
Images:



SDS-PAGE analysis of Anti-CHEK2 Antibody [PCRP-CHEK2-1A4] under non-reduced and reduced conditions; showing intact IgG and intact heavy and light chains, respectively. SDS-PAGE analysis confirms the integrity and purity of the antibody.



Immunofluorescent analysis of PFA-fixed HeLa cells stained with Anti-CHEK2 Antibody [PCRP-CHEK2-1A4] followed by Goat Anti-Mouse IgG (CF® 488) (Green). Microtubules stained with Phalloidin

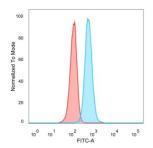


Immunofluorescent analysis of PFA-fixed K562 cells stained with Anti-CHEK2 Antibody [PCRP-CHEK2-1A4] followed by Goat Anti-Mouse IgG (CF® 488) (Green). Phalloidin (Red).



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Images continued:



Flow cytometric analysis of PFA-fixed HeLa cells using Anti-CHEK2 Antibody [PCRP-CHEK2-1A4] followed by Goat Anti-Mouse IgG (CF® 488) (Blue). Unstained cells (Red).