# CHEK2 Antibody

Mouse Monoclonal Antibody [Clone PCRP-CHEK2-1A4]

| Catalog No | Format | Size |
|---|---|---|
| 11200-MSM3-P0 | Purified Ab with BSA and Azide at 200ug/ml | 20 ug |
| 11200-MSM3-P1 | Purified Ab with BSA and Azide at 200ug/ml | 100 ug |
| 11200-MSM3-P1ABX | Purified Ab WITHOUT BSA and Azide at 1.0mg/ml | 100 ug |

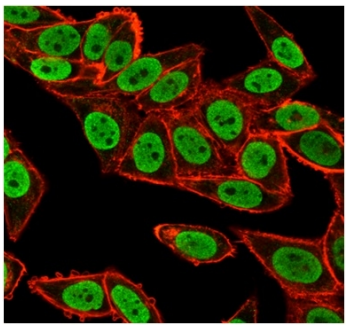
| Applications | Tested Dillution | Note |
|---|---|---|
| Flow Cytometry (Flow) | 1-2ug/million cells | |
| Immunofluorescence (IF) | 1-3ug/ml | |
| Western Blot (WB) | 2-4ug/ml | |

## Product Details

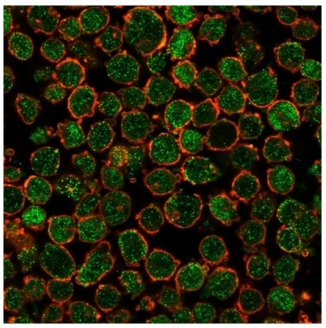
| | |
|---|---|
| **Clone** | PCRP-CHEK2-1A4 |
| **Gene Name** | CHEK2 |
| **Immunogen** | Recombinant fragment of human CHEK2 corresponding to protein domain |
| **Host** | Mouse |
| **Clonality** | Monoclonal |
| **Isotype / Light Chain** | IgG2b |
| **Mol. Weight of Antigen** | 60.91kDa |
| **Cellular Localization** | Nucleoplasm, Nucleus, PML body |
| **Species Reactivity** | Human |
| **Positive Control** | HeLa or HCT 116cells.Human testis, spleen or colon. |

**Optimal dilution for a specific application should be determined.*

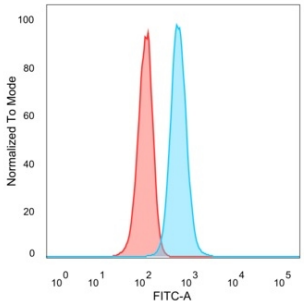
## Product Images for CHEK2 Antibody



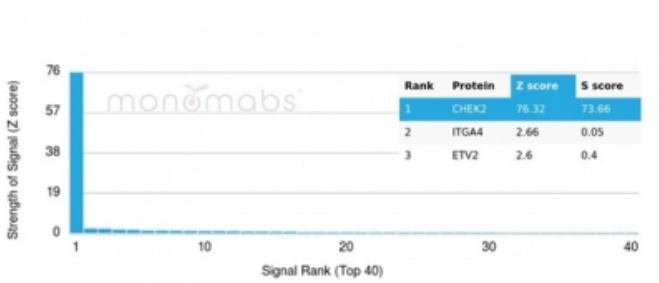
Immunofluorescence analysis of PFA-fixed HeLa cells. CHEK2 Mouse Monoclonal Antibody (PCRP-CHEK2-1A4) followed by goat anti-mouse IgG-CF488 (green). Microtubules stained with phalloidin.



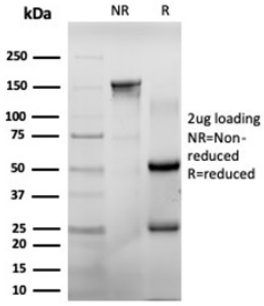
Immunofluorescence analysis of PFA-fixed K562 cells. CHEK2 Mouse Monoclonal Antibody (PCRP-CHEK2-1A4) followed by goat anti-mouse IgG-CF488 (green). Phalloidin (red).




Flow cytometric analysis of PFA-fixed HeLa cells. CHEK2 Mouse Monoclonal Antibody (PCRP-CHEK2-1A4) followed by goat anti-mouse IgG-CF488 (blue), unstained cells (red).




Analysis of Protein Array containing more than 19,000 full-length human proteins using CHEK2 Mouse Monoclonal Antibody (PCRP-CHEK2-1A4). Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProtTM array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProtTM are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a MAb to its intended target. A MAb is considered to specific to its intended target, if the MAb has an S-score of at least 2.5. For example, if a MAb binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that MAb to protein X is equal to 29.




SDS-PAGE Analysis of Purified CHEK2 Mouse Monoclonal Antibody (PCRP-CHEK2-1A4). Confirmation of Purity and Integrity of Antibody.

## Specificity & Comments

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.

## Supplied As

200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

## Storage and Stability

Antibody with azide - store at 2 to 8 °C. Antibody without azide - store at -20 to -80 °C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

## Research Areas

Transcription Factors

## Limitations and Warranty

This antibody is available for research use only and is not approved for use in diagnosis.There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.