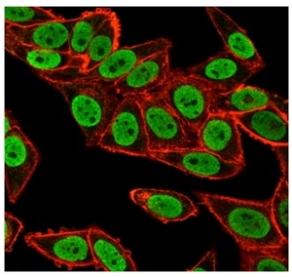
Chk2 Antibody / CHEK2 [clone PCRP-CHEK2-1A4] (V9603)

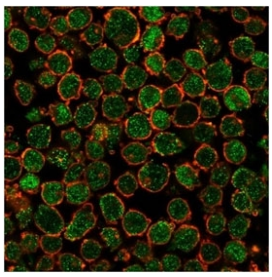
Catalog No.	Formulation	Size
V9603-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V9603-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V9603SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

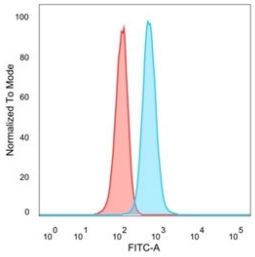
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2b
Clone Name	PCRP-CHEK2-1A4
Purity	Protein A/G affinity
UniProt	O96017
Localization	Nucleus
Applications	Flow Cytometry : 1-2ug/million cells Western Blot : 1-2ug/ml Immunofluorescence : 1-2ug/ml
Limitations	This Chk2 antibody is available for research use only.



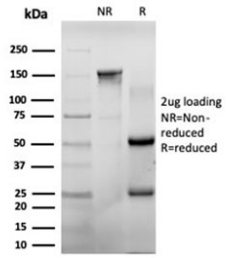
Immunofluorescent staining of PFA-fixed human HeLa cells using Chk2 antibody (green, clone PCRP-CHEK2-1A4) and phalloidin (red).



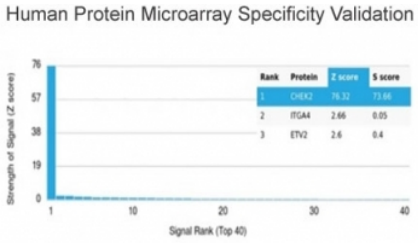
Immunofluorescent staining of PFA-fixed human K562 cells Chk2 antibody (green, clone PCRP-CHEK2-1A4) and phalloidin (red).



FACS staining of PFA-fixed human HeLa cells with Chk2 antibody (blue, clone PCRP-CHEK2-1A4), and unstained cells (red).



SDS-PAGE analysis of purified, BSA-free Chk2 antibody (clone PCRP-CHEK2-1A4) as confirmation of integrity and purity.



Analysis of HuProt(TM) microarray containing more than 19,000 full-length human proteins using Chk2 antibody (clone PCRP-CHEK2-1A4). These results demonstrate the foremost specificity of the PCRP-CHEK2-1A4 mAb. Z- and S- score: The Z-score represents the strength of a signal that an antibody (in combination with a fluorescently-tagged anti-IgG secondary Ab) produces when binding to a particular protein on the HuProt(TM) array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If the targets on the HuProt(TM) are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-scores. The S-score therefore represents the relative target specificity of an Ab to its intended target.

Description

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.

Application Notes

Optimal dilution of the Chk2 antibody should be determined by the researcher.

Immunogen

A recombinant protein fragment was used as the immunogen for the Chk2 antibody.

Storage

Aliquot the Chk2 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.