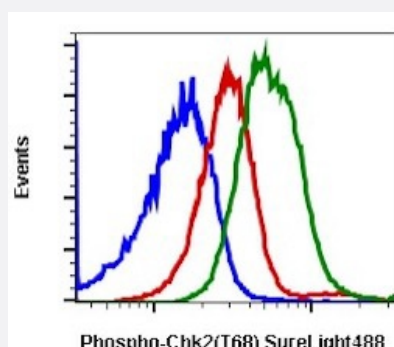


CHEK2 (phospho T68) monoclonal antibody, clone D12 (SureLight 488)

Catalog # MAB23444 Size 100 Reactions

Applications



Flow Cytometry

Flow cytometric analysis of HeLa cells with CHEK2 (phospho T68) monoclonal antibody, clone D12 (SureLight 488) (Cat # MAB23444). Unstained and untreated cells as negative control (blue) or stained and untreated (red) or stained and treated with UV plus TPA (green).

Specification

Product Description	Rabbit monoclonal antibody raised against synthetic phosphopeptide of human CHEK2.
Immunogen	A synthetic phosphopeptide corresponding to residues surrounding T68 of human CHEK2.
Host	Rabbit
Reactivity	Human, Mouse
Form	Liquid
Conjugation	SureLight 488
Purification	Protein A/G purification
Isotype	IgG1, kappa
Recommend Usage	Flow Cytometry (5 μ L/ 10^6 cells) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS, pH 7.4 (0.2% BSA, 0.09% sodium azide).

Storage Instruction

Store at 4°C.

Note

This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Applications

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Gene Info — CHEK2

Entrez GeneID

[11200](#)

Gene Name

CHEK2

Gene Alias

CDS1, CHK2, HuCds1, LFS2, PP1425, RAD53

Gene Description

CHK2 checkpoint homolog (S. pombe)

Omim ID

[114480](#) [176807](#) [259500](#) [604373](#) [609265](#)

Gene Ontology

[Hyperlink](#)

Gene Summary

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. Three transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq]

Other Designations

OTTHUMP00000028871|checkpoint-like protein CHK2|protein kinase CHK2|serine/threonine-protein kinase CHK2

Pathway

- [Cell cycle](#)
- [p53 signaling pathway](#)

Disease

- [Adenocarcinoma](#)
- [Adenoma](#)
- [Ataxia telangiectasia](#)
- [Atherosclerosis](#)
- [Barrett Esophagus](#)
- [Brain Neoplasms](#)
- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Carcinoma](#)
- [Cell Transformation](#)
- [Colon cancer](#)
- [Colonic Neoplasms](#)
- [Colorectal Neoplasms](#)
- [DNA Damage](#)
- [Endometrial Neoplasms](#)
- [Esophageal Neoplasms](#)
- [Genetic Predisposition to Disease](#)
- [Glioma](#)
- [Head and Neck Neoplasms](#)
- [Hypertension](#)
- [Kidney Diseases](#)
- [Kidney Failure](#)

- [Kidney Neoplasms](#)
- [Laryngeal Neoplasms](#)
- [Leukemia](#)
- [Lung Neoplasms](#)
- [Malignant melanoma](#)
- [Melanoma](#)
- [Meningeal Neoplasms](#)
- [Meningioma](#)
- [Mouth Neoplasms](#)
- [Neoplasm Invasiveness](#)
- [Neoplasm Metastasis](#)
- [Neoplasm Recurrence](#)
- [Neoplasms](#)
- [Neoplastic Syndromes](#)
- [Neuroma](#)
- [Ovarian cancer](#)
- [Ovarian Neoplasms](#)
- [Pancreatic cancer](#)
- [Pancreatic Neoplasms](#)
- [Pharyngeal Neoplasms](#)
- [Prostate cancer](#)
- [Prostatic Neoplasms](#)
- [Pulmonary Disease](#)
- [Skin Neoplasms](#)
- [Urinary Bladder Neoplasms](#)
- [Werner syndrome](#)