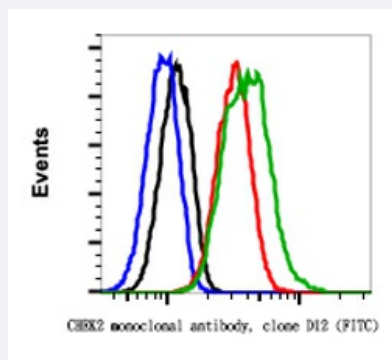


CHEK2 (phospho T68) monoclonal antibody, clone D12 (FITC)

Catalog # MAB23408

Size 100 Reactions

Applications



Flow Cytometry

Flow cytometric analysis of Hela cells with CHEK2 (phospho Thr68) monoclonal antibody, clone D12 (FITC)(Cat # MAB23408). Treated with lambda phosphatase (red) or treated with UV+TPA (green).

Specification

Product Description	Rabbit monoclonal antibody raised against synthetic phosphopeptide of human CHEK2.
Immunogen	A synthetic phosphor-peptide corresponding to residues surrounding to Thr68 of human phospho Chk2
Host	Rabbit
Reactivity	Human
Form	Liquid
Conjugation	FITC
Isotype	IgG1, kappa
Recommend Usage	Flow Cytometry (5 uL/million cells) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS (0.09% NaN ₃ , 0.2% BSA)
Storage Instruction	Store at 4°C. Do not freeze.

Note

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

Applications

- Flow Cytometry

Flow cytometric analysis of Hela cells with CHEK2 (phospho Thr68) monoclonal antibody, clone D12 (FITC)(Cat # MAB23408). Treated with lambda phosphatase (red) or treated with UV+TPA (green).

Gene Info — CHEK2

Entrez GeneID [11200](#)

Protein Accession# [O96017](#)

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](#)