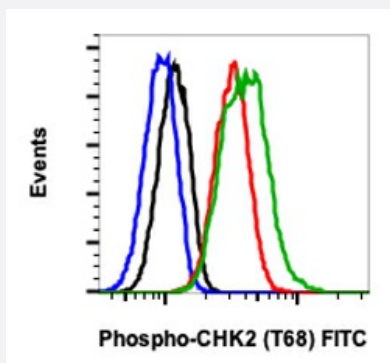


RecomAb™

CHEK2 recombinant monoclonal antibody, clone Chk2T68-D12 (FITC)

Catalog # RAB02937 Size 100 Reactions

Applications



Flow Cytometry

Flow cytometric analysis of HeLa cells treated with lambda phosphatase (red) or treated with UV+TPA (green) using Phospho-CHEK2 (Thr68) (D12) Rabbit mAb (FITC Conjugate) CHEK2T68-D12, or concentration-matched Rabbit (G9) mAb IgG Isotype Control (FITC Conjugate) for cells treated with lambda phosphatase (black) or treated with UV+TPA (blue).

Specification

Product Description	Rabbit recombinant monoclonal antibody raised against human CHEK2.
Antibody Species	Rabbit
Immunogen	A synthetic phosphor-peptide corresponding to residues surrounding to Thr68 of human phospho Chk2
Reactivity	Human
Form	Liquid
Conjugation	FITC
Purification	Protein A purification, Protein G purification
Isotype	IgG
Recommend Usage	Flow Cytometry The optimal working dilution should be determined by the end user.

Storage Buffer	1X PBS, 0.09% Sodium azide, 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 treated with lambda phosphatase (red) or treated with UV+TPA (green) using Phospho-CHEK2 (Thr68) (D12) Rabbit mAb (FITC Conjugate) CHK2T68-D12, or concentration-matched Rabbit (G9) mAb IgG Isotype Control (FITC Conjugate) for cells treated with lambda phosphatase (black) or treated with UV+TPA (blue).

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]
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Other Designations	OTTHUMP00000028871 checkpoint-like protein CHK2 protein kinase CHK2 serine/threonine-protein kinase CHK2
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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](#)