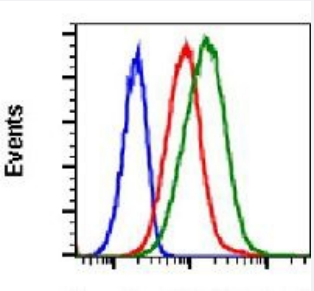
CHEK2 (phospho T68) monoclonal antibody, clone D12 (APC)

Catalog # MAB21598 Size 100 Reactions

Applications



Flow Cytometry

Flow cytometric analysis of HeLa cells with CHEK2 (phospho T68) monoclonal antibody, clone D12 (APC) (Cat # MAB21598). Unstained and untreated 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
Form	Liquid
Conjugation	APC
Purification	Protein A/G purification
Isotype	IgG1, kappa
Recommend Usage	Flow Cytometry (5 uL/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.

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

Applications

- Flow Cytometry

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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 c ontrol of critical cell cycle regulators. The protein encoded by this gene is a cell cycle checkpoint r egulator and putative tumor suppressor. It contains a forkhead-associated protein interaction dom ain essential for activation in response to DNA damage and is rapidly phosphorylated in respons e 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 s uppressor 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 u sually associated with inherited mutations in TP53. Also, mutations in this gene are thought to con fer a predisposition to sarcomas, breast cancer, and brain tumors. This nuclear protein is a mem ber 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-pr otein kinase CHK2

Pathway

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- 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

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- 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

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- Werner syndrome

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