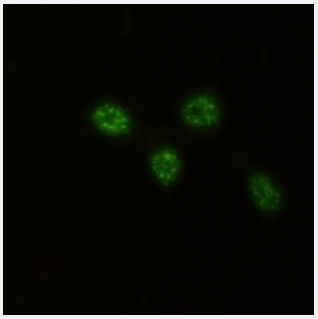
RecomAb™ Sm Size

CHEK2 recombinant monoclonal antibody

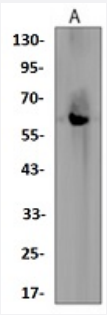
Catalog # RAB09152 Size 50 uL

Applications



Immunofluorescence

Immunofluorescent analysis of HCT116 cells with CHK2 recombinant monoclonal antibody (Cat # RAB09152). Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark.



Western Blot (Cell lysate)

Western blot analysis of Jurkat (A) whole cell lysates with CHK2 recombinant monoclonal antibody (Cat # RAB09152).

Specification

Product Description	Rabbit recombinant monoclonal antibody raised against human CHEK2.
Antibody Species	Rabbit
Immunogen	Original antibody is raised against recombinant protein of human Chk2.
Theoretical MW (kDa)	62
Reactivity	Human

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Specificity	Recognizes endogenous levels of CHK2 protein.
Form	Liquid
Preparation Method	Mammalian cell (HEK293) expression system
Purification	Immunogen affinity chromatography
Isotype	IgG
Recommend Usage	Immunocytochemistry (1:50-1:100) Immunofluorescence (1:50-1:100) Immunoprecipitation(1:10-1:50) Western Blot (1:500-1:1000) The optimal working dilution should be determined by the end user.
Storage Buffer	In 50mM Tris-Glycine, pH 7.4 (0.15M NaCl, 50% Glycerol, 0.01% Sodium azide and 0.05% BSA)
Storage Instruction	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze-thaw cycles.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only.

Applications

- Immunofluorescence

  Immunofluorescent analysis of HCT116 cells with CHK2 recombinant monoclonal antibody (Cat # RAB09152). Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark.

- Western Blot (Cell lysate)

  Western blot analysis of Jurkat (A) whole cell lysates with CHK2 recombinant monoclonal antibody (Cat # RAB09152).

Gene Info — CHEK2

Entrez GeneID	11200
Protein Accession#	O96017
Gene Name	CHEK2
Gene Alias	CDS1, CHK2, HuCds1, LFS2, PP1425, RAD53

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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

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- 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

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- 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

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