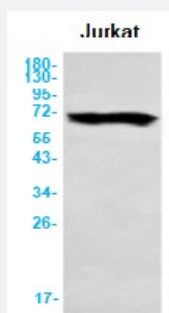


RecomAb™

CHEK2 recombinant monoclonal antibody, clone R04-8E5

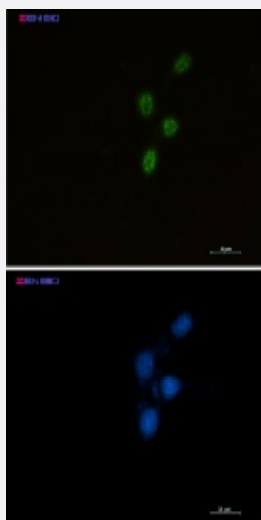
Catalog # RAB01503 Size 100 uL

Applications



Western Blot

Western blot analysis of Chk2 in Jurkat lysates using human Chk2 recombinant monoclonal antibody, clone R04-8E5 (Cat # RAB01503).



Immunocytochemistry

Immunocytochemistry analysis of Chk2 (green) in HCT116 using human Chk2 recombinant monoclonal antibody, clone R04-8E5 (Cat # RAB01503), and DAPI (blue).

Specification

Product Description	Rabbit recombinant monoclonal antibody raised against human Chk2.
Antibody Species	Rabbit
Immunogen	Original antibody is raised against recombinant protein corresponding to human Chk2
Theoretical MW (kDa)	Calculated MW: 61 kD

Reactivity	Human
Form	Liquid
Purification	Affinity purification
Isotype	IgG
Recommend Usage	Immunofluorescence (1:50-1:200) Immunoprecipitation (1:20) Western Blot (1:500-1:1000) The optimal working dilution should be determined by the end user.
Storage Buffer	In 50 mM Tris-Glycine, pH 7.4 (0.15 M NaCl, 40% Glycerol, 0.01% Sodium azide and 0.05% BSA)
Storage Instruction	Store at 4°C for short term. For long term storage store at -20°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Applications

- Western Blot

Western blot analysis of Chk2 in Jurkat lysates using human Chk2 recombinant monoclonal antibody, clone R04-8E5 (Cat # RAB01503).

- Immunocytochemistry

Immunocytochemistry analysis of Chk2 (green) in HCT116 using human Chk2 recombinant monoclonal antibody, clone R04-8E5 (Cat # RAB01503), and DAPI(blue).

- Immunoprecipitation

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](#)