

CHEK2 rabbit monoclonal antibody

Catalog # H00011200-K Size 100 ug x up to 3

Specification

Product Description	Rabbit monoclonal antibody raised against a human CHEK2 peptide using ARM Technology.
Immunogen	A synthetic peptide of human CHEK2 is used for rabbit immunization. Customer or Abnova will decide on the preferred peptide sequence.
Host	Rabbit
Library Construction	Non-fusion antibody library from rabbit spleen (ARM Technology).
Expression	Overexpression vector and transfection into 293H cell line.
Reactivity	Human
Purification	Protein A
Isotype	IgG
Quality Control Testing	Antibody reactive against human CHEK2 peptide by ELISA and mammalian transfected lysate by Western Blot.
Storage Buffer	In 1x PBS, pH 7.4
Storage Instruction	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Deliverable	Up to three rabbit IgG clones of 100 ug each will be delivered to customer.
Note	1. Customer may provide cell or tissue lysate for antibody screening. 2. Rabbit monoclonal antibody generated by ARM technology is amenable to antibody engineering including F(ab) ₂ , IgG, scFv and different Fc and non-Fc conjugates per customer request.

Applications

- Western Blot (Transfected lysate)

[Protocol Download](#)

- ELISA

Gene Info — CHEK2

Entrez GeneID [11200](#)

GeneBank Accession# [CHEK2](#)

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](#)