

## CHEK2 Polyclonal Antibody

**Catalog No.** E-AB-64013

*Note:* Centrifuge before opening to ensure complete recovery of vial contents.

### Description

<b>Reactivity</b>	Human, Mouse
<b>Immunogen</b>	Recombinant fusion protein of human CHEK2 (NP_009125.1).
<b>Host</b>	Rabbit
<b>Isotype</b>	IgG
<b>Purification</b>	Affinity purification
<b>Conjugation</b>	Unconjugated
<b>Buffer</b>	PBS with 0.02% sodium azide, 50% glycerol, pH7.3.

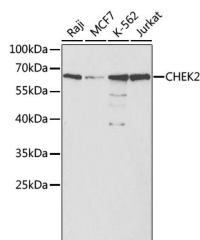
### Applications Recommended Dilution

**WB 1:500-1:2000 IHC**

**1:50-1:100 IF**

**1:50-1:200**

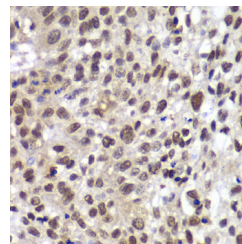
### Data



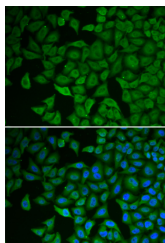
Western blot analysis of extracts of various cell lines using CHEK2 Polyclonal Antibody at dilution of 1:1000.

**Observed Mw:60kDa**

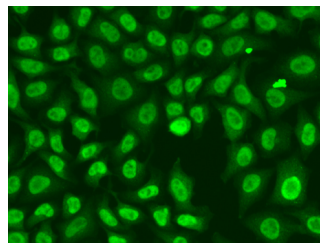
**Calculated Mw:15-38kDa/50-65kDa**



Immunohistochemistry of paraffin-embedded Human lung cancer using CHEK2 Polyclonal Antibody at dilution of 1:100 (40x lens).



Immunofluorescence analysis of HeLa cells using CHEK2 Polyclonal Antibody



Immunofluorescence analysis of A549 cells using CHEK2 Polyclonal Antibody

### Preparation & Storage

**Storage** Store at -20°C. Avoid freeze / thaw cycles.

### For Research Use Only

## Background

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. Several transcript variants encoding different isoforms have been found for this gene.