# **Elabscience**®

# **CHEK2** Polyclonal Antibody

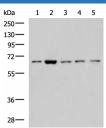
### catalog number: E-AB-53245

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

Description	
Reactivity	Human
Immunogen	Synthetic peptide of human CHEK2
Host	Rabbit
Isotype	IgG
Purification	Antigen affinity purification
Conjugation	Unconjugated
Buffer	Phosphate buffered solution, pH 7.4, containing 0.05% stabilizer and 50% glycerol.

Applications	Recommended Dilution
WB	1:500-1:2000

#### Data



Western blot analysis of 293T LOVO Hela and Jurkat cell lysates using CHEK2 Polyclonal Antibody at dilution of 1:600

> Observed-MV:Refer to figures Calculated-MV:61 kDa

Preparation & Storage	
Storage	Store at -20°C Valid for 12 months. Avoid freeze / thaw cycles.
Shipping	The product is shipped with ice pack, upon receipt, store it immediately at the
	temperature recommended.

#### 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.

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