

# Product datasheet

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# ARG67185 anti-CHEK2 phospho (Thr383) antibody

Package: 100 μl Store at: -20°C

### **Summary**

Product Description Rabbit Polyclonal antibody recognizes CHEK2 phospho (Thr383)

Tested Reactivity Hu, Ms, Rat

Tested Application ELISA, ICC/IF, WB

Host Rabbit

Clonality Polyclonal

Isotype IgG

Target Name CHEK2

Species Human

Immunogen Synthetic peptide of Human phospho CHEK2 (Thr383)

Conjugation Un-conjugated

Alternate Names CDS1; CHK2; HuCds1; PP1425; RAD53; Serine/Threonine-Protein Kinase Chk2; CHK2 Checkpoint

Homolog; Cds1 Homolog; BA444G7; HCds1; CHK2 (Checkpoint, S.Pombe) Homolog; CHK2 Checkpoint Homolog (S. Pombe); Checkpoint-Like Protein CHK2; EC 2.7.11.1; EC 2.7.11; Hucds1; TPDS4; LFS2

# **Application Instructions**

Application table	Application	Dilution
	ELISA	1:20000
	ICC/IF	1:200-1:1000
	WB	1:500-1:2000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

#### **Properties**

Form Liquid

Purification Affinity purification with immunogen.

Buffer PBS, 0.02% Sodium azide, 0.5% BSA and 50% Glycerol

Preservative 0.02% Sodium azide

Stabilizer 0.5% BSA, 50% Glycerol

Concentration 1 mg/ml

Storage instruction For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed

before use.

#### Bioinformation

Gene Symbol

CHEK2

Gene Full Name

Checkpoint Kinase 2

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. [provided by RefSeq, Apr 2012]

Function

Serine/threonine-protein kinase which is required for checkpoint-mediated cell cycle arrest, activation of DNA repair and apoptosis in response to the presence of DNA double-strand breaks. May also negatively regulate cell cycle progression during unperturbed cell cycles. Following activation, phosphorylates numerous effectors preferentially at the consensus sequence [L-X-R-X-X-S/T]. [UniProt]

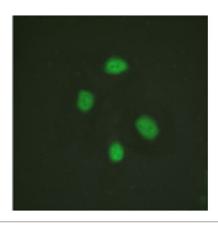
Calculated Mw

60 kDa

Cellular Localization

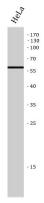
Nucleus, PML body, nucleoplasm. [UniProt]

## **Images**



#### ARG67185 anti-CHEK2 phospho (Thr383) antibody ICC/IF image

Immunofluorescence: Hela cells stained with ARG67185 anti-CHEK2 phospho (Thr383) antibody.



#### ARG67185 anti-CHEK2 phospho (Thr383) antibody WB image

Western blot: Hela cells stained with ARG67185 anti-CHEK2 phospho (Thr383) antibody at 1:1000 dilution.