# ARG67239
# anti-CHEK2 antibody

Package: 100 µl
Store at: -20°C

## Summary

| | |
|---|---|
| Product Description | Rabbit Polyclonal antibody recognizes CHEK2 |
| Tested Reactivity | Hu, Ms, Rat |
| Tested Application | ICC/IF, IHC-P, WB |
| Host | Rabbit |
| Clonality | Polyclonal |
| Isotype | IgG |
| Target Name | CHEK2 |
| Conjugation | Un-conjugated |
| Alternate Names | CHEK2; Checkpoint Kinase 2; 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 |
|---|---|
| ICC/IF | 1:100 - 1:500 |
| IHC-P | 1:100 - 1:500 |
| WB | 1:1000 - 1:2000 |

Application Note: * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

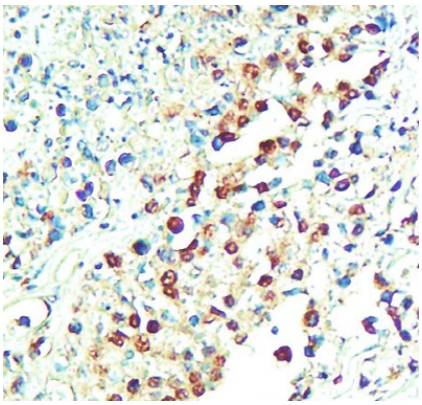
## Properties

| | |
|---|---|
| Form | Liquid |
| Purification | Affinity purified |
| Buffer | 100 mM Tris Glycine (pH 7.0), 0.025% ProClin 300 and 20% Glycerol. |
| Preservative | 0.025% ProClin 300 |
| Stabilizer | 20% Glycerol |
| Concentration | 1.26 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. |
| Note | For laboratory research only, not for drug, diagnostic or other use. |

## Bioinformation

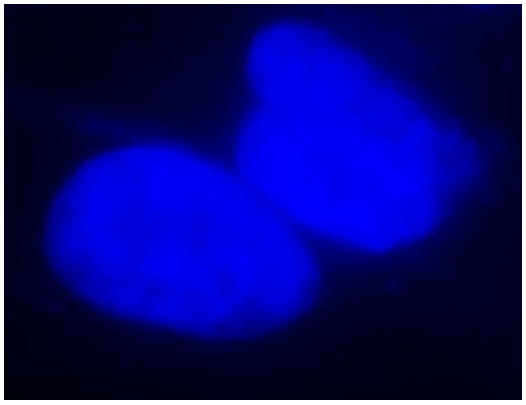
| | |
|---|---|
| Gene Symbol | CHEK2 |
| Gene Full Name | Checkpoint Kinase 2 |
| Background | In response to DNA damage and replication blocks, cell cycle progression is halted through the control of critical cell cycle regulators. The protein encoded by this gene is a cell cycle checkpoint regulator 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 | Under oxidative stress, promotes ATG7 ubiquitination by phosphorylating the E3 ubiquitin ligase TRIM32 at 'Ser-55' leading to positive regulation of the autophagosme assembly. [Uniprot] |
| Calculated Mw | 61 kDa |
| PTM | Phosphoprotein, Ubl conjugation. [Uniprot] |
| Cellular Localization | Nucleus. [Uniprot] |

## Images



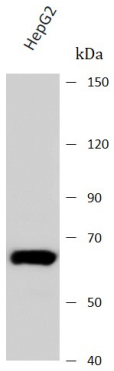
ARG67239 anti-CHEK2 antibody IHC-P image

Immunohistochemistry: Human cancer tissue stained with ARG67239 anti-CHEK2 antibody at 1:100 dilution.



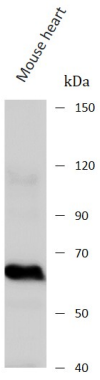
ARG67239 anti-CHEK2 antibody ICC/IF image

Immunofluorescence: JurKat stained with ARG67239 anti-CHEK2 antibody at 1:400 dilution.




ARG67239 anti-CHEK2 antibody WB image

Western blot: HepG2 stained with ARG67239 anti-CHEK2 antibody at 1:1000 dilution.




ARG67239 anti-CHEK2 antibody WB image

Western blot: Mouse heart stained with ARG67239 anti-CHEK2 antibody at 1:1000 dilution.