# Chk2 Rabbit mAb

Catalog No.: A19543 Recombinant 6 Publications



### **Basic Information**

## **Observed MW**

62kDa

### **Calculated MW**

15-38kDa/50-65kDa

#### Category

SMab Recombinant Monoclonal Antibody

### **Applications**

WB,IHC-P,IF/ICC,ELISA

### **Cross-Reactivity**

Human, Mouse

### CloneNo number

ARC57076

## **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.

## **Recommended Dilutions**

**WB** 1:2000 - 1:8000

**IF/ICC** 1:200 - 1:800

IHC-P 1:100 - 1:500

**ELISA** Recommended starting

concentration is 1 µg/mL. Please optimize the concentration based on your specific assay requirements.

### Contact

www.abclonal.com

## **Immunogen Information**

Gene ID	Swiss Prot
11200	O96017

### **Immunogen**

Synthetic peptide. This information is considered to be commercially sensitive.

### **Synonyms**

CDS1; CHK2; LFS2; RAD53; hCds1; HuCds1; PP1425; Chk2

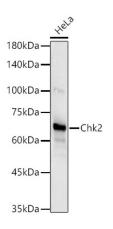
### **Product Information**

SourceIsotypePurificationRabbitIgGAffinity purification

### Storage

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

Buffer: PBS containing 50% glycerol and 0.05% BSA, preserved with proclin300 or sodium azide (as specified on the Certificate of Analysis), pH 7.3.



Western blot analysis of lysates from HeLa cells, using Chk2 Rabbit mAb (A19543) at 1:7000 dilution.

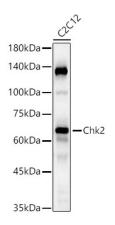
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.

Lysates/proteins: 25µg per lane.

Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Basic Kit (RM00020).

Exposure time: 90s.



Western blot analysis of lysates from C2C12 cells, using Chk2 Rabbit mAb (A19543) at 1:7000 dilution.

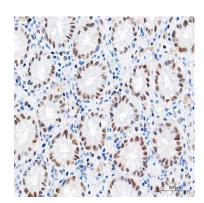
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.

Lysates/proteins: 25µg per lane.

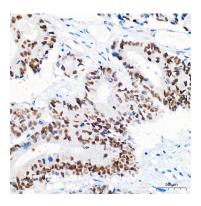
Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Basic Kit (RM00020).

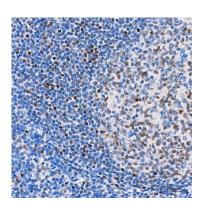
Exposure time: 90s.



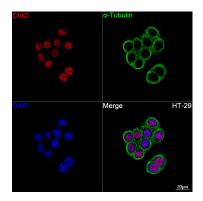
Immunohistochemistry analysis of paraffin-embedded Human colon tissue using Chk2 Rabbit mAb (A19543) at a dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



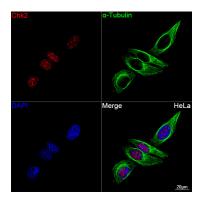
Immunohistochemistry analysis of paraffin-embedded Human colon cancer tissue using Chk2 Rabbit mAb (A19543) at a dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



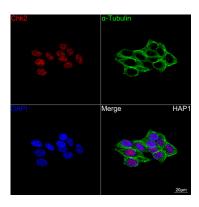
Immunohistochemistry analysis of paraffin-embedded Human tonsil tissue using Chk2 Rabbit mAb (A19543) at a dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



Confocal imaging of HT-29 cells using Chk2 Rabbit mAb (A19543, dilution 1:200) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). The cells were counterstained with  $\alpha$ -Tubulin Mouse mAb (AC012, dilution 1:400) followed by incubation with ABflo® 488-conjugated Goat Anti-Mouse IgG (H+L) Ab (AS076, dilution 1:500) (Green). DAPI was used for nuclear staining (Blue). Objective: 100x.



Confocal imaging of HeLa cells using Chk2 Rabbit mAb (A19543, dilution 1:200) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). The cells were counterstained with  $\alpha$ -Tubulin Mouse mAb (AC012, dilution 1:400) followed by incubation with ABflo® 488-conjugated Goat Anti-Mouse IgG (H+L) Ab (AS076, dilution 1:500) (Green). DAPI was used for nuclear staining (Blue). Objective: 100x.



Confocal imaging of HAP1 cells using Chk2 Rabbit mAb (A19543, dilution 1:200) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). The cells were counterstained with α-Tubulin Mouse mAb (AC012, dilution 1:400) followed by incubation with ABflo® 488-conjugated Goat Anti-Mouse IgG (H+L) Ab (AS076, dilution 1:500) (Green). DAPI was used for nuclear staining (Blue). Objective: 100x.