

## Chk2 Rabbit mAb

Catalog No: #48967

Package Size: #48967-1 50ul #48967-2 100ul

Orders: [order@signalwayantibody.com](mailto:order@signalwayantibody.com)Support: [tech@signalwayantibody.com](mailto:tech@signalwayantibody.com)

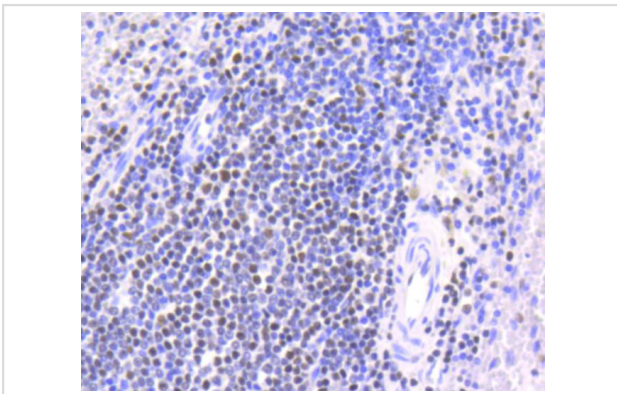
## Description

Product Name	Chk2 Rabbit mAb
Host Species	Recombinant Rabbit
Clonality	Monoclonal antibody
Clone No.	SC604
Purification	ProA affinity purified
Applications	WB, ICC/IF, IHC, IP
Species Reactivity	Human
Immunogen Description	recombinant protein
Conjugates	Unconjugated
Other Names	CDS 1 antibody Cds1 antibody Cds1 homolog antibody Checkpoint kinase 2 antibody Checkpoint like protein CHK2 antibody CHEK 2 antibody Chek2 antibody Chk 2 antibody CHK2 checkpoint homolog (S. pombe) antibody CHK2 checkpoint homolog antibody CHK2_HUMAN antibody hCds1 antibody HuCds 1 antibody LFS 2 antibody LFS2 antibody PP1425 antibody RAD 53 antibody RAD53 antibody Rad53 homolog antibody Serine/threonine protein kinase Chk2 antibody Serine/threonine-protein kinase Chk2 antibody
Accession No.	Swiss-Prot#:O96017
Calculated MW	61 kDa
SDS-PAGE MW	61 kDa
Formulation	1*TBS (pH7.4), 1%BSA, 40%Glycerol. Preservative: 0.05% Sodium Azide.
Storage	Store at -20°C

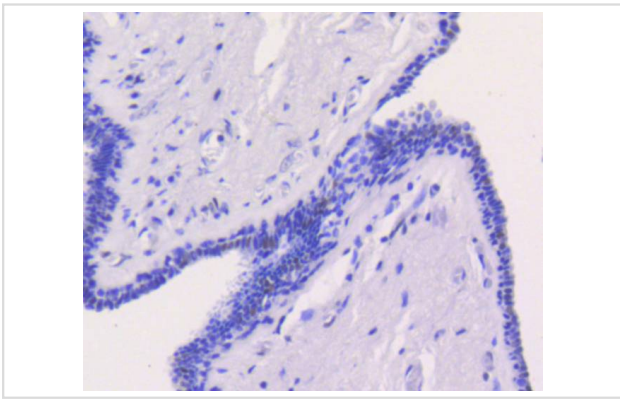
## Application Details

WB: 1:1,000-1:2,000 IHC: 1:50-1:200 ICC: 1:50-1:200

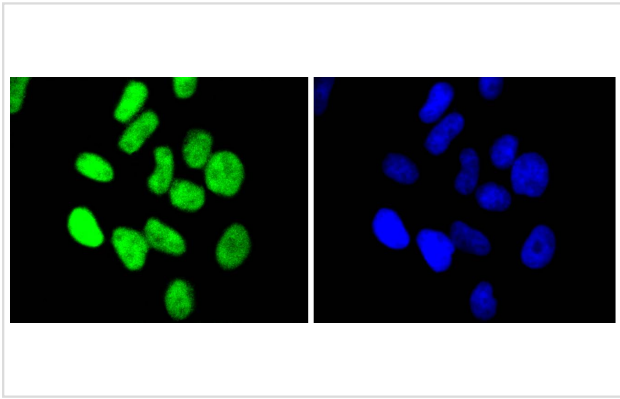
## Images



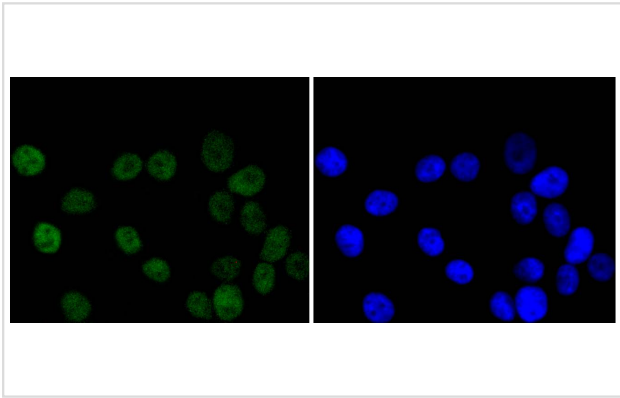
Immunohistochemical analysis of paraffin-embedded human spleen tissue using anti-Chk2 antibody. Counter stained with hematoxylin.



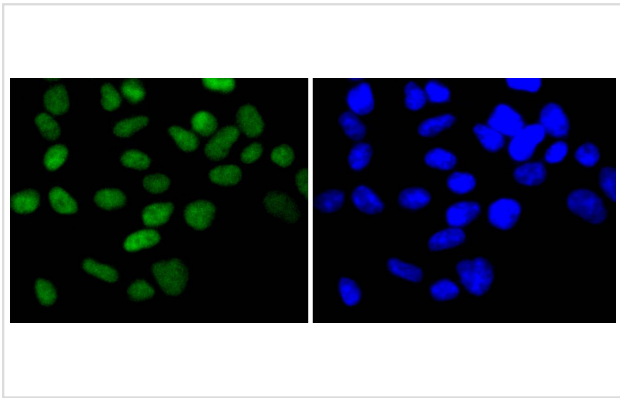
Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using anti-Chk2 antibody. Counter stained with hematoxylin.



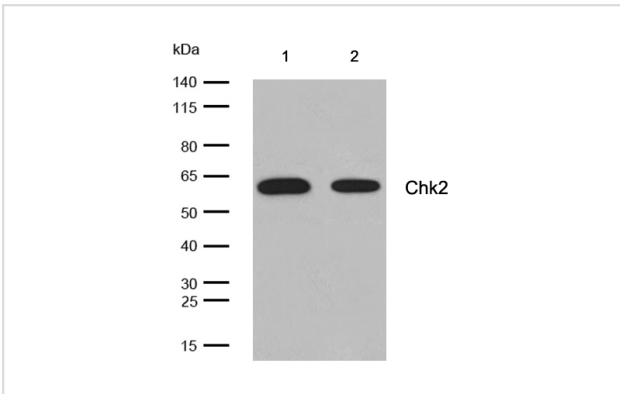
ICC staining Chk2 in HeLa cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



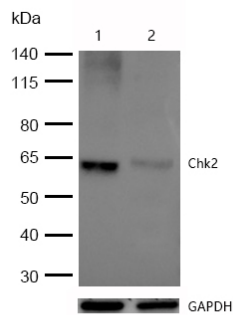
ICC staining Chk2 in MCF-7 cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



ICC staining Chk2 in 293 cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



All lanes: Chk2 Rabbit mAb at 1/1k dilution  
 Lane 1 : HeLa whole cell lysates  
 Lane 2 : 293T whole cell lysates  
 Lysates/proteins at 20 µg per lane.  
 Secondary All lanes : Goat Anti-Rabbit IgG H&L (HRP) at 1/20000 dilution  
 Predicted band size: 61 kDa  
 Observed band size: 61 kDa  
 Exposure time: 3 seconds



All lanes :Chk2 Rabbit mAb at 1/1k dilution  
 Lane 1 : Wild-type A549 cell lysate  
 Lane 2 : Chk2 knockdown A549 cell lysate  
 Lysates/proteins at 20 µg per lane.

## Background

Cell cycle events are regulated by the sequential activation and deactivation of cyclin dependent kinases (Cdks) and by proteolysis of cyclins. Chk1 and Chk2 are involved in these processes as regulators of Cdks. Chk1 and Chk2 both function as essential components in the G2 DNA damage checkpoint by phosphorylating Cdc25C in response to DNA damage. Phosphorylation inhibits Cdc25C activity, thereby blocking mitosis. Cdc25A, Cdc25B and Cdc25C protein tyrosine phosphatases function as mitotic activators by dephosphorylating Cdc2 p34 on regulatory tyrosine residues. It has also been shown that Chk1 can phosphorylate Wee1 *in vitro*, providing evidence that the hyperphosphorylated form of Wee1, seen in cells delayed by Chk1 overexpression, is due to phosphorylation by Chk1.

## References

1. Li WF et al. WISP-1 contributes to fractionated irradiation-induced radioresistance in esophageal carcinoma cell lines and mice. *PLoS One* 9:e94751 (2014).
2. Sowd GA et al. SV40 utilizes ATM kinase activity to prevent non-homologous end joining of broken viral DNA replication products. *PLoS Pathog* 10:e1004536 (2014).

Note: This product is for *in vitro* research use only and is not intended for use in humans or animals.