Chk1 Rabbit mAb

Catalog No: #48908

Package Size: #48908-1 50ul #48908-2 100ul

Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

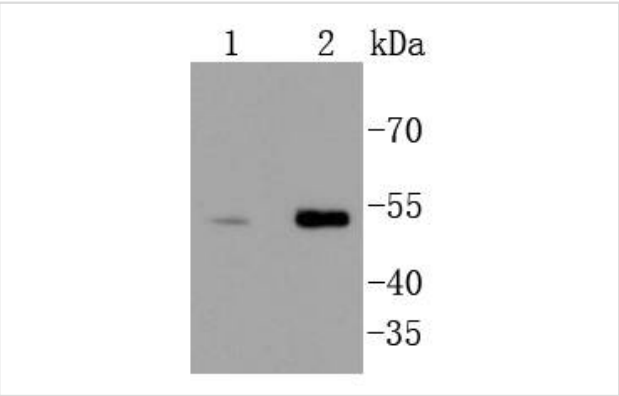
Description

Product Name	Chk1 Rabbit mAb
Host Species	Recombinant Rabbit
Clonality	Monoclonal antibody
Clone No.	ST57-09
Purification	ProA affinity purified
Applications	WB, ICC/IF, IHC, FC
Species Reactivity	Hu
Immunogen Description	recombinant protein
Other Names	C85740 antibody Cell cycle checkpoint kinase antibody Checkpoint , S. pombe, homolog of, 1 antibody Checkpoint kinase 1 antibody Checkpoint kinase 1 homolog (S. pombe) antibody CHEK 1 antibody Chek1 antibody Chk 1 antibody Chk1 antibody CHK1 checkpoint homolog (S. pombe) antibody CHK1_HUMAN antibody EC 2.7.11.1 antibody rad27 antibody Serine/threonine protein kinase Chk1 antibody Serine/threonine-protein kinase CHK1 antibody STT3, subunit of the oligosaccharyltransferase complex, homolog A (S. cerevisiae) antibody
Accession No.	Swiss-Prot#:O14757
Calculated MW	54 kDa
Formulation	1*TBS (pH7.4), 1%BSA, 40%Glycerol. Preservative: 0.05% Sodium Azide.
Storage	Store at -20°C

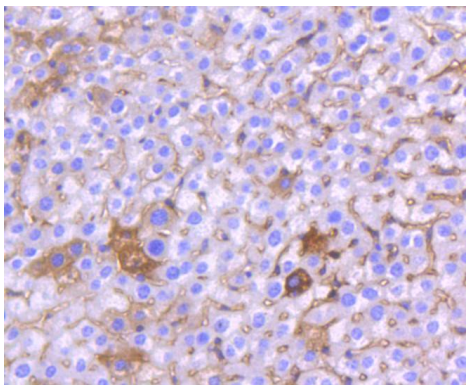
Application Details

WB: 1:1,000-1:2,000 IHC: 1:50-1:200 ICC: 1:50-1:200FC: 1:50-1:100

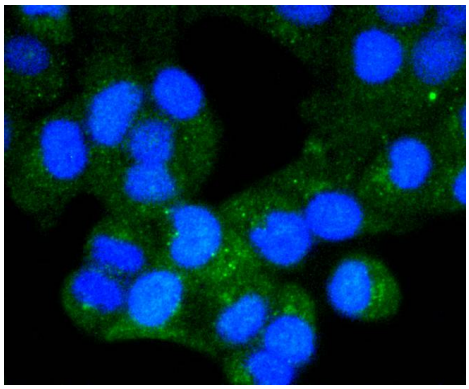
Images



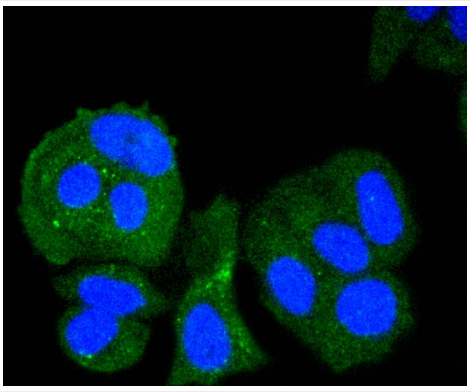
Western blot analysis of Chk1 on different lysates using anti-Chk1 antibody at 1/1,000 dilution. Positive control: Lane 1: Hela Lane 2: PC-3M



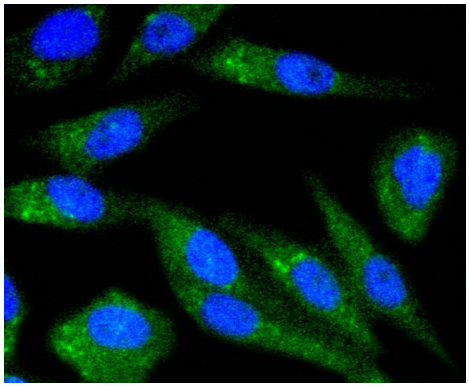
Immunohistochemical analysis of paraffin-embedded mouse liver tissue using anti-Chk1 antibody. Counter stained with hematoxylin.



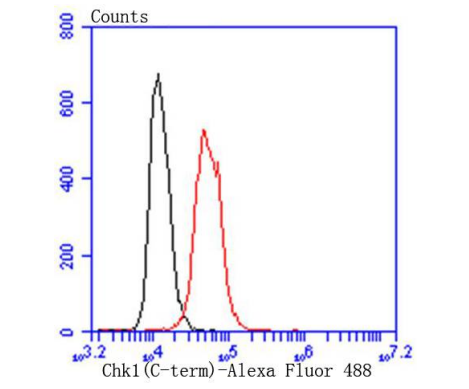
ICC staining Chk1 in Hela cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



ICC staining Chk1 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 Chk1 in PC-3M cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



Flow cytometric analysis of Hela cells with Chk1 antibody at 1/50 dilution (red) compared with an unlabelled control (cells without incubation with primary antibody; black). Alexa Fluor 488-conjugated goat anti rabbit IgG was used as the secondary antibody

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. Okita N et al. CHK1 cleavage in programmed cell death is intricately regulated by both caspase and non-caspase family proteases. Biochim Biophys Acta 1830:2204-13 (2013). 2. Gray JE et al. A phase I, pharmacokinetic, and pharmacodynamic study of panobinostat, an HDAC inhibitor, combined with erlotinib in patients with advanced aerodigestive tract tumors. Clin Cancer Res 20:1644-55 (2014).

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