Cyclin B1 Rabbit mAb

Catalog No: #48818

Package Size: #48818-1 50ul #48818-2 100ul

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

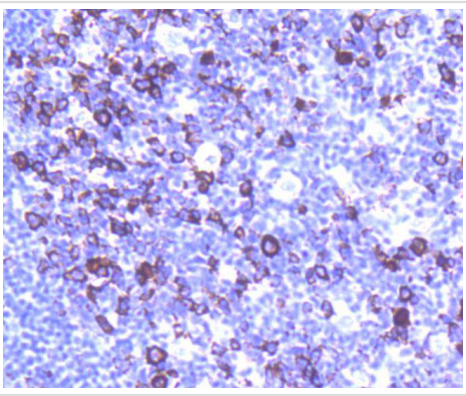
Description

Product Name	Cyclin B1 Rabbit mAb
Host Species	Recombinant Rabbit
Clonality	Monoclonal antibody
Clone No.	SU33-03
Purification	ProA affinity purified
Applications	WB, ICC/IF, IHC, IP
Species Reactivity	Human
Immunogen Description	recombinant protein
Conjugates	Unconjugated
Other Names	CCNB 1 antibody CCNB antibody ccnb1 antibody CCNB1_HUMAN antibody Cyclin B1 antibody G2 mitotic specific cyclin B1 antibody G2/mitotic-specific cyclin-B1 antibody
Accession No.	Swiss-Prot#:P14635
Calculated MW	48 kDa
SDS-PAGE MW	55 kDa
Formulation	1*TBS (pH7.4), 1%BSA, 40%Glycerol. Preservative: 0.05% Sodium Azide.
Storage	Store at -20°C

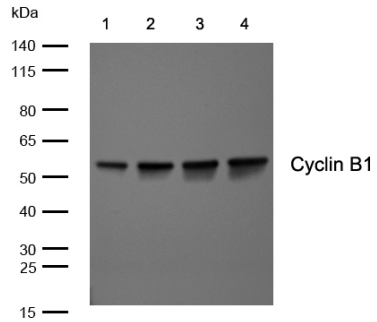
Application Details

WB: 1:1,000-5,000IHC: 1:50-1:200ICC: 1:50-1:200

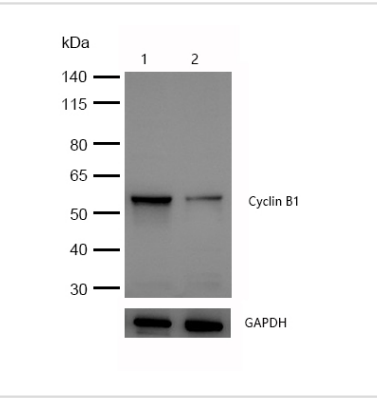
Images



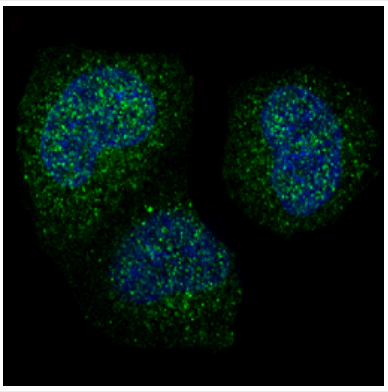
Immunohistochemical analysis of paraffin-embedded human tonsil tissue using anti-Cyclin B1 antibody. Counter stained with hematoxylin.



All lanes: Cyclin B1 Rabbit mAb at 1/1k dilutionLane 1 : Mouse liver lysates Lane 2 : Hela whole cell lysates Lane 3 : JK whole cell lysates Lane 4 : MCF-7 whole cell lysates Lysates/proteins at 20 µg per lane.SecondaryAll lanes : Goat Anti-Rabbit IgG H&L (HRP) at 1/20000 dilutionPredicted band size: 48 kDa Observed band size: 55 kDaExposure time: 4 seconds



All lanes :Cyclin B1 Rabbit mAb at 1/1k dilutionLane 1 : Wild-type HT-1080 cell lysateLane 2 : Cyclin B1 knockdown HT-1080 cell lysateLysates/proteins at 20 µg per lane.



Immunocytochemistry/ Immunofluorescence Cyclin B1 antibody (48818) ICC/IF staining of Cyclin B1 in Hela cells. Cells were fixed with 4% Paraformaldehyde permeabilized with 0.1% Triton X-100.

Samples were incubated with 48818 at a working dilution of 1/100. The secondary antibody was Alexa FluorB 488 goat anti rabbit, used at a dilution of 1/500.

Nuclei were counterstained with DAPI.

Background

In eukaryotic cells, mitosis is initiated following the activation of a protein kinase known variously as maturation-promoting factor, M-phase specific histone kinase or M-phase kinase. This protein kinase is composed of a catalytic subunit (Cdc2), a regulatory subunit (cyclin B) and a low molecular weight subunit (p13-Suc 1). The Cdc/cyclin enzyme is subject to multiple levels of control, of which the regulation of the catalytic subunit by tyrosine phosphorylation is the best understood. Tyrosine phosphorylation inhibits the Cdc2/cyclin B enzyme; tyrosine dephosphorylation, occurring at the onset of mitosis, directly activates the pre-MPF complex. Evidence has established that B type cyclins not only act on M-phase regulatory subunits of the Cdc2 protein kinase, but also activate the Cdc25A and Cdc25B endogenous tyrosine phosphatase, of which Cdc2 is the physiological substrate. The specificity of this effect is shown by the inability of either cyclin A or cyclin D1 to display any such stimulation of Cdc25A or Cdc25B.

References

1. Nabti I et al. Dual-mode regulation of the APC/C by CDK1 and MAPK controls meiosis I progression and fidelity. J Cell Biol 204:891-900 (2014). 2. Penas C et al. Casein kinase 1d-dependent Wee1 protein degradation. J Biol Chem 289:18893-903 (2014).

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