

Cdk4 Rabbit mAb

Catalog No: #49117



Package Size: #49117-1 50ul #49117-2 100ul

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

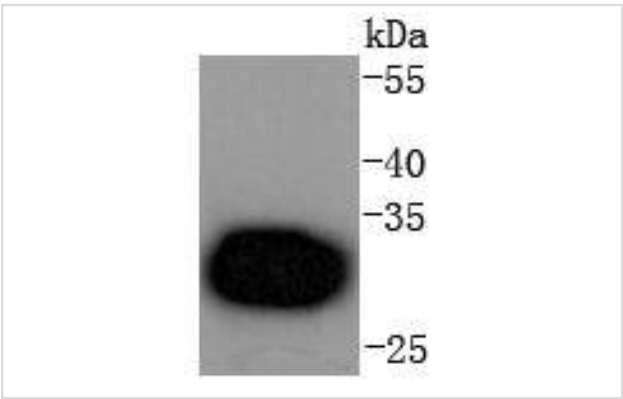
Description

Product Name	Cdk4 Rabbit mAb
Host Species	Recombinant Rabbit
Clonality	Monoclonal antibody
Clone No.	SD20-42
Purification	ProA affinity purified
Applications	WB, ICC/IF, IHC, FC
Species Reactivity	Hu
Immunogen Description	recombinant protein
Other Names	Cdk 4 antibody cdk4 antibody CDK4 protein antibody CDK4_HUMAN antibody Cell division kinase 4 antibody Cell division protein kinase 4 antibody CMM 3 antibody CMM3 antibody Crk3 antibody Cyclin dependent kinase 4 antibody Cyclin-dependent kinase 4 antibody Melanoma cutaneous malignant 3 antibody MGC14458 antibody p34 cdk4 antibody PSK J3 antibody PSK-J3 antibody
Accession No.	Swiss-Prot#:P11802
Calculated MW	34 kDa
Formulation	1*TBS (pH7.4), 1%BSA, 40%Glycerol. Preservative: 0.05% Sodium Azide.
Storage	Store at -20°C

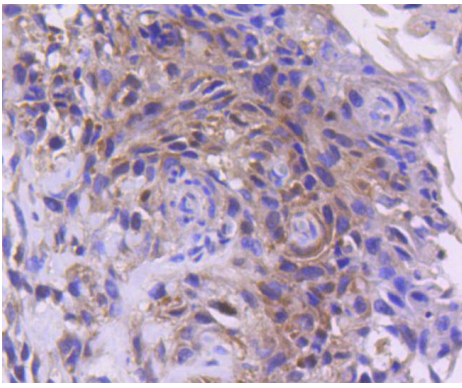
Application Details

WB: 1:1,000-5,000IHC: 1:50-1:200 ICC: 1:100-1:500FC: 1:50-1:100

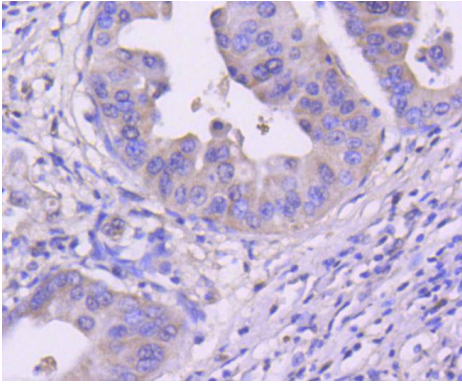
Images



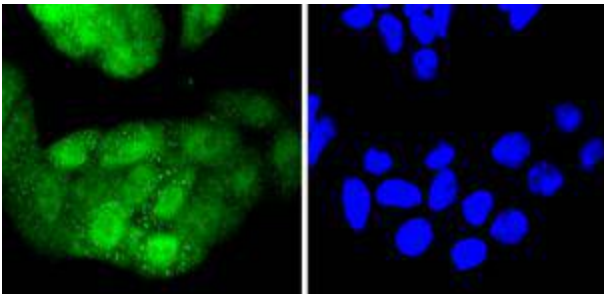
Western blot analysis of Cdk4 on Hela cells lysates using anti-Cdk4 antibody at 1/1,000 dilution.



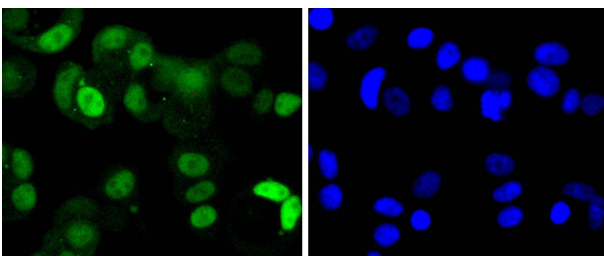
Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using anti-Cdk4 antibody. Counter stained with hematoxylin.



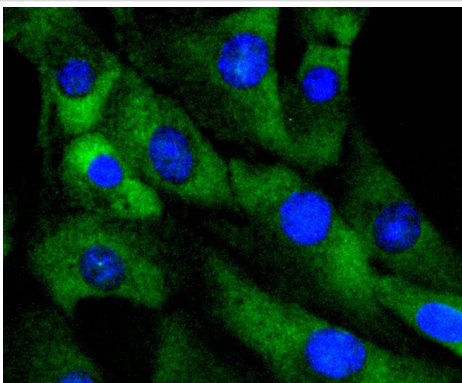
Immunohistochemical analysis of paraffin-embedded human gastric carcinoma tissue using anti-Cdk4 antibody. Counter stained with hematoxylin.



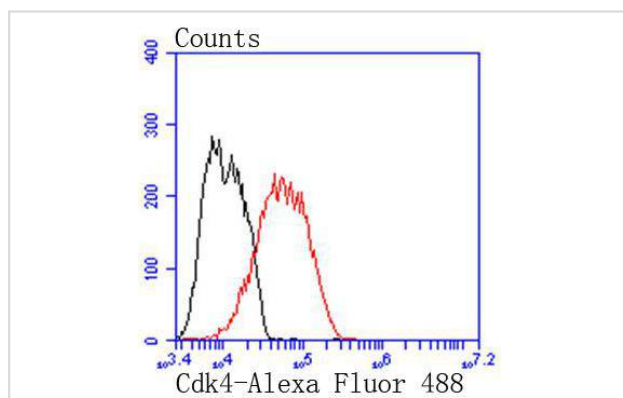
ICC staining Cdk4 in Hela cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



ICC staining Cdk4 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 Cdk4 in NIH/3T3 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 MCF-7 cells with Cdk4 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 progression is controlled in part by a family of cyclin proteins and cyclin dependent kinases (Cdks). Cdk proteins work in concert with the cyclins to phosphorylate key substrates involved in each phase of cell cycle progression. Another family of proteins, Cdk inhibitors, also plays a role in regulating the cell cycle by binding to cyclin-Cdk complexes and modulating their activity. Several Cdk proteins have been identified, including Cdk2-Cdk8, PCTAIRE-1-PCTAIRE-3, PITALRE and PITSLRE. Cdk4, in complex with D-type cyclins, is thought to regulate cell growth during the G1 phase of the cell cycle. This association with a D-type cyclin upregulates Cdk4 activity, whereas binding to the Cdk inhibitor p16 downregulates Cdk4 activity. Activation of the Cdk4-cyclin complexes requires phosphorylation on a single threonyl residue of Cdk4, catalyzed by a Cdk-activating protein (CAK).

References

1. Machado-Neto, JA. et al. 2014. ANKHD1, a novel component of the Hippo signaling pathway, promotes YAP1 activation and cell cycle progression in prostate cancer cells. *Exp. Cell Res.* 324: 137-45.
2. Liu, Y. et al. 2010. Rosiglitazone inhibits cell proliferation by inducing G1 cell cycle arrest and apoptosis in ADPKD cyst-lining epithelia cells. *Basic Clin. Pharmacol. Toxicol.* 106: 523-530.

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