

Cdk7 Rabbit mAb

Catalog No: #49233

Package Size: #49233-1 50ul #49233-2 100ul

Orders: order@signalwayantibody.com

Support: tech@signalwayantibody.com

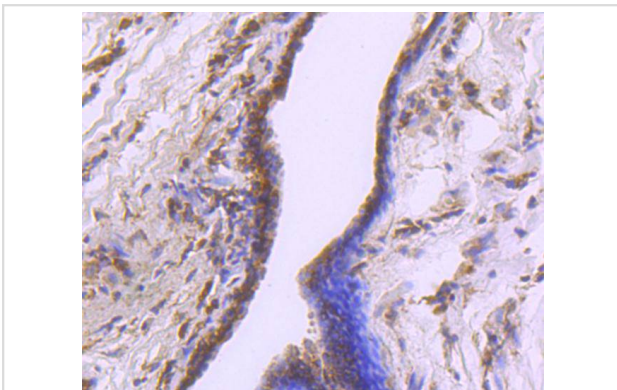
Description

Product Name	Cdk7 Rabbit mAb
Host Species	Recombinant Rabbit
Clonality	Monoclonal antibody
Clone No.	JJ203-01
Purification	ProA affinity purified
Applications	WB, ICC/IF, IHC, FC
Species Reactivity	Hu
Immunogen Description	recombinant protein
Other Names	39 kDa protein kinase antibody CAK antibody CAK1 antibody Cdk activating kinase antibody CDK-activating kinase 1 antibody CDK-activating kinase antibody cdk7 antibody CDK7_HUMAN antibody CDKN7 antibody Cell division protein kinase 7 antibody Cyclin dependent kinase 7 antibody cyclin-dependent kinase 7 (MO15 homolog, Xenopus laevis, cdk-activating kinase) antibody Cyclin-dependent kinase 7 antibody HCAK antibody Homolog of Xenopus MO15 Cdk activating kinase antibody Kinase subunit of CAK antibody MO15 antibody MO15, Xenopus, homolog of antibody P39 Mo15 antibody p39MO15 antibody Serine threonine kinase Stk1 antibody Serine/threonine protein kinase 1 antibody Serine/threonine protein kinase MO15 antibody STK1 antibody TFIIH basal transcription factor complex kinase subunit antibody
Accession No.	Swiss-Prot#:P50613
Uniprot	P50613
GeneID	1022;
Calculated MW	39 kDa
Formulation	1*TBS (pH7.4), 1%BSA, 40%Glycerol. Preservative: 0.05% Sodium Azide.
Storage	Store at -20°C

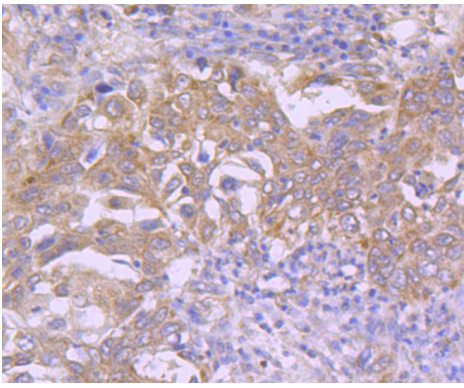
Application Details

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

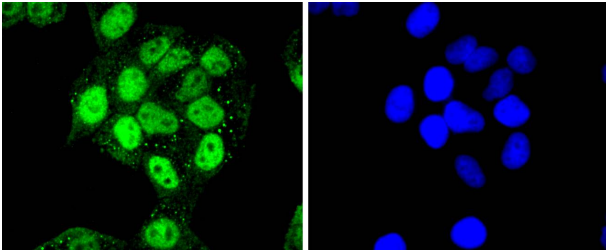
Images



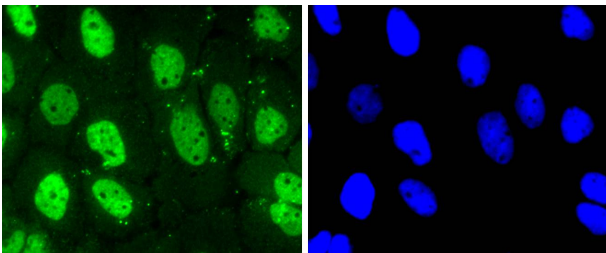
Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using anti-Cdk7 antibody. Counter stained with hematoxylin.



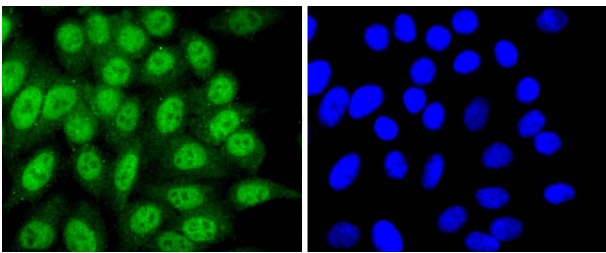
Immunohistochemical analysis of paraffin-embedded human lung cancer tissue using anti-Cdk7 antibody. Counter stained with hematoxylin.



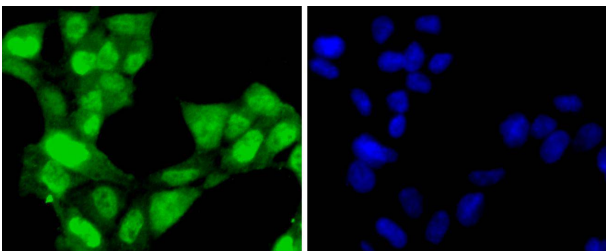
ICC staining Cdk7 in A431 cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



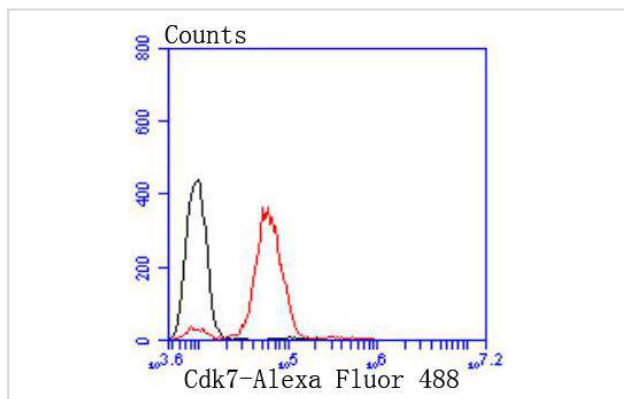
ICC staining Cdk7 in Hela cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



ICC staining Cdk7 in HepG2 cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



ICC staining Cdk7 in 293 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 A431 cells with Cdk7 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

Progression through the cell cycle requires activation of a series of enzymes designated cyclin dependent kinases (Cdks). The monomeric catalytic subunit Cdk2, a critical enzyme for initiation of cell cycle progression, is completely inactive. Partial activation is achieved by the binding of regulatory cyclins such as cyclin D1, while full activation requires additional phosphorylation at Thr 160. The enzyme responsible for the phosphorylation of Cdk2 on Thr 160 and also of Cdc2 p34 on Thr 161, designated Cdk-activating kinase (CAK), has been partially purified and shown to be comprised of a catalytic subunit and a regulatory subunit. The catalytic subunit, designated Cdk7, has been identified as the mammalian homolog of MO15, a protein kinase demonstrated in starfish and *Xenopus*. The regulatory subunit is a novel cyclin (cyclin H) and is required for activation of Cdk7. Like other Cdks, Cdk7 contains a conserved threonine residue required for full activity; mutation of this residue severely reduces CAK activity.

References

Note: This product is for in vitro research use only