

CDK2 (PT0233R) PT® Rabbit mAb

Catalog No :	YM8146
Reactivity :	Human; Mouse; Rat;
Applications :	WB;IHC;IF;IP;ELISA
Gene Name :	>>FoxO signaling pathway;>>Cell cycle;>>Oocyte meiosis;>>p53 signaling pathway;>>PI3K-Akt signaling pathway;>>Cellular senescence;>>Progesterone-mediated oocyte maturation;>>Cushing syndrome;>>Hepatitis C;>>Hepatitis B;>>Measles;>>Human papillomavirus infection;>>Human T-cell leukemia virus 1 infection;>>Epstein-Barr virus infection;>>Pathways in cancer;>>Viral carcinogenesis;>>Prostate cancer;>>Small cell lung cancer;>>Gastric cancer
Protein Name :	CDK2
Sequence :	Cyclin-dependent kinase 2
Human Gene Id :	1017
Human Swiss Prot No :	P24941
Mouse Gene Id :	12566
Mouse Swiss Prot No :	P97377
Rat Swiss Prot No :	Q63699
Specificity :	endogenous
Formulation :	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
Source :	Monoclonal, rabbit, IgG, Kappa
Dilution :	IHC 1:1000-1:4000,WB 1:1000-1:5000,IF 1:200-1:1000,ELISA 1:5000-1:20000,IP 1:50-1:200,
Purification :	Protein A

Storage Stability : -15°C to -25°C/1 year(Do not lower than -25°C)

Molecularweight : 34kD

Observed Band : 34kD

Cell Pathway : Cell_Cycle_G1S;Cell_Cycle_G2M_DNA;Oocyte meiosis;p53;Progesterone-mediated oocyte maturation;Pathways in cancer;Prostate cancer;Small cell lung cancer;

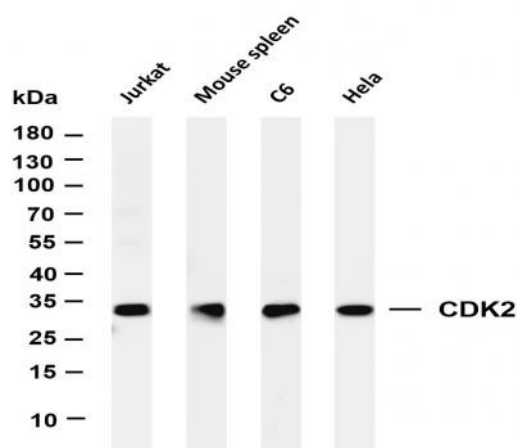
Background : cyclin dependent kinase 2(CDK2) Homo sapiens This gene encodes a member of a family of serine/threonine protein kinases that participate in cell cycle regulation. The encoded protein is the catalytic subunit of the cyclin-dependent protein kinase complex, which regulates progression through the cell cycle. Activity of this protein is especially critical during the G1 to S phase transition. This protein associates with and regulated by other subunits of the complex including cyclin A or E, CDK inhibitor p21Cip1 (CDKN1A), and p27Kip1 (CDKN1B). Alternative splicing results in multiple transcript variants. [provided by RefSeq, Mar 2014],

Function : catalytic activity:ATP + a protein = ADP + a phosphoprotein.,enzyme regulation:Phosphorylation at Thr-14 or Tyr-15 inactivates the enzyme, while phosphorylation at Thr-160 activates it.,function:Involved in the control of the cell cycle. Interacts with cyclins A, B1, B3, D, or E. Activity of CDK2 is maximal during S phase and G2.,similarity:Belongs to the protein kinase superfamily.,similarity:Belongs to the protein kinase superfamily. CMGC Ser/Thr protein kinase family. CDC2/CDKX subfamily.,similarity:Contains 1 protein kinase domain.,subunit:Found in a complex with CABLES1, CCNA1 and CCNE1. Interacts with CABLES1 (By similarity). Interacts with UHRF2. Part of a complex consisting of UHRF2, CDK2 and CCNE1. Interacts with the Speedy/Ringo proteins SPDYA and SPDYC. Found in a complex with both SPDYA and CDKN1B/KIP1.,

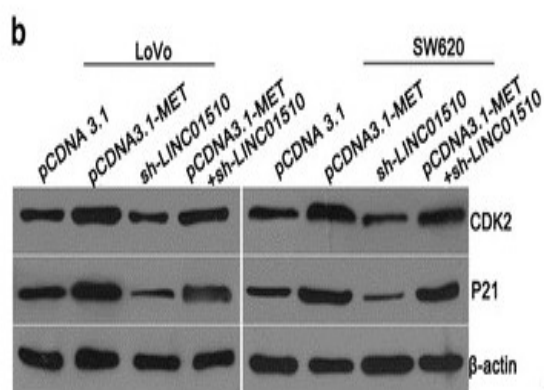
Subcellular Location : Cytoplasm

Expression : Epithelium,Lung,Placenta,

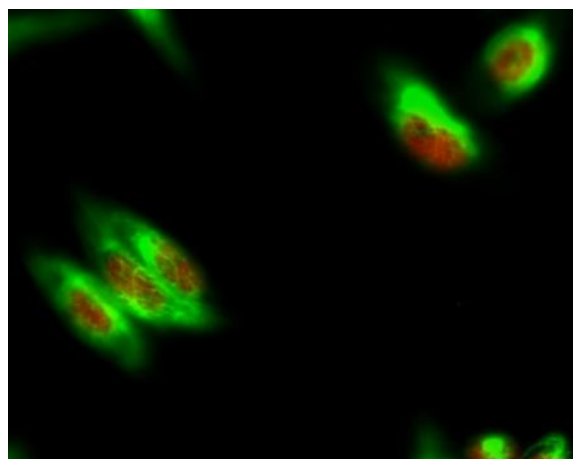
Products Images



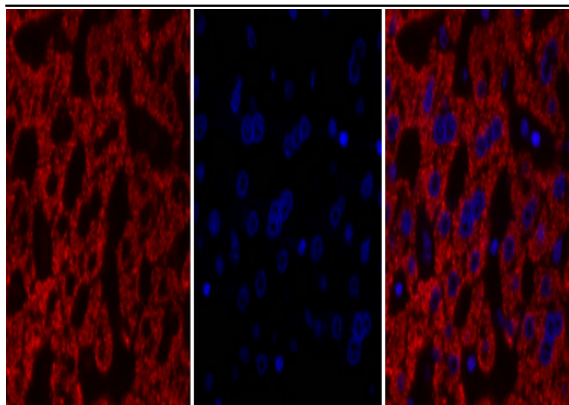
Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-CDK2 (PT0233R) antibody. The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: Jurkat Lane 2: Mouse spleen Lane 3: C6 Lane 4: HeLa Predicted band size: 34kDa Observed band size: 34kDa



Cen, Chaoqun, et al. "Long noncoding RNA LINC01510 promotes the growth of colorectal cancer cells by modulating MET expression." *Cancer cell international* 18.1 (2018): 45.



Immunofluorescence analysis of HeLa cell. 1, Cdk2 Antibody (red) was diluted at 1:200 (4° overnight). NSE Monoclonal Antibody (13E2) (green) was diluted at 1:200 (4° overnight). 2, Goat Anti Rabbit Alexa Fluor 594 Catalog:RS3611 was diluted at 1:1000 (room temperature, 50min). Goat Anti Mouse Alexa Fluor 488 Catalog:RS3208 was diluted at 1:1000 (room temperature, 50min).

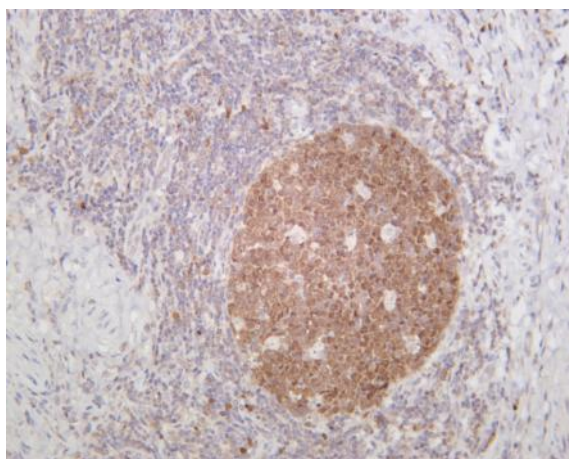


A

B

C

Immunofluorescence analysis of human-liver tissue. 1, Cdk2 Antibody (red) was diluted at 1:200 (4 °C, overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300 (room temperature, 50 min). 3, Picture B: DAPI (blue) 10 min. Picture A: Target. Picture B: DAPI. Picture C: merge of A+B



Human tonsil was stained with anti-CDK2 (PT0233R) rabbit antibody