Anti-CDK1 Rabbit mAb

Purified Recombinant Rabbit Monoclonal Antibody

Catalog # R015095

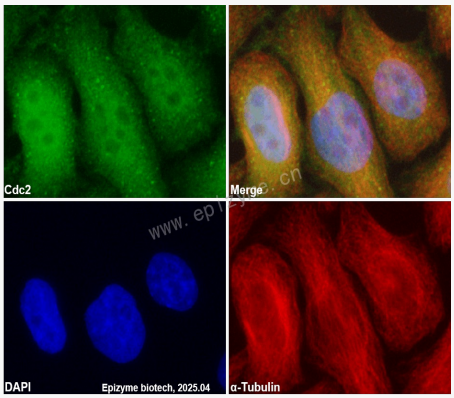
Product Information

Application	WB, IHC-P/IF (Tissue-P), IF (Cell)/ICC, ELISA
Reactivity	Human
Dilution	WB 1:2,000~1:10,000; IHC-P 1:1,000~1:4,000; IF 1:200~1:1,000
Host	Rabbit
Clonality	Monoclonal
Clone No.	64L56J82
Isotype	IgG
Label	Unconjugated
Immunogen	Recombinant protein of human CDK1
Format	Affinity purified monoclonal antibody supplied in PBS with 0.01% sodium azide and 50% glycerol, pH 7.3.
Storage	Shipped on wet ice. Store at -20°C. Stable for 24 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	Anti-CDK1 Rabbit mAb [64L56J82] is for research use only and not for use in diagnostic or therapeutic procedures.

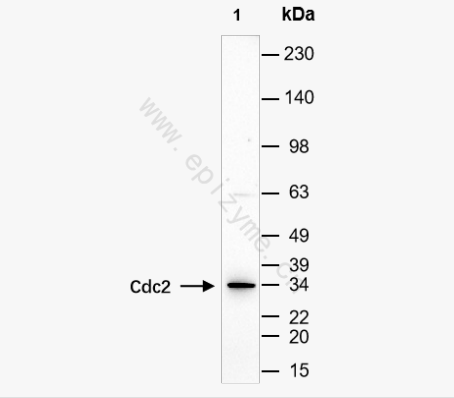
Protein Information

Synonyms	Cdc 2, Cdc2, CDC28A, CDK 1, CDK1, CDK1_HUMAN, CDKN1, CELL CYCLE CONTROLLER CDC2, Cell division control protein 2, Cell division control protein 2 homolog, Cell division cycle 2 G1 to S and G2 to M, Cell division protein kinase 1, Cell Divsion Cycle 2 Protein, Cyclin Dependent Kinase 1, Cyclin-dependent kinase 1, DKFZp686L20222, MGC111195, p34 Cdk1, p34 protein kinase, P34CDC2.
Calculated MW	Calculated MW: 34 kDa; Observed MW: 34 kDa
Uniprot ID	P06493
Gene ID	983
Background	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]
Cellular Location	Nucleus.
Tissue Location	Isoform 2 is found in breast cancer tissues.

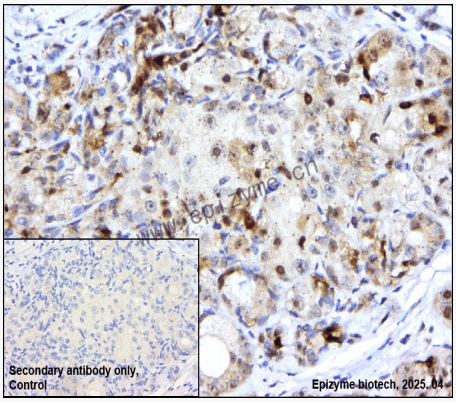
Validation Images



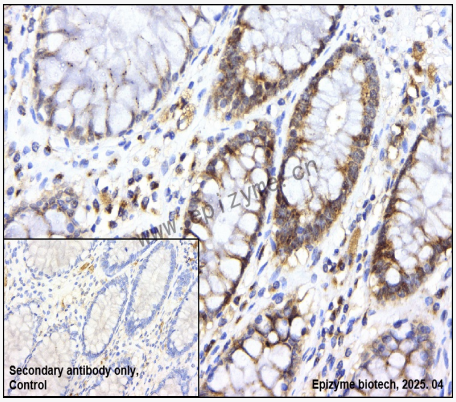
Immunofluorescence - Anti-CDK1 Rabbit mAb [64L56J82]
Sample: HeLa cells
The cells were fixed with 4% paraformaldehyde (10 min), permeabilized with 0.5% Triton X-100 for 10 minutes and then blocked with 5% BSA in 0.1% PBS-Tween for 0.5 hours.
Primary antibodies: R015095 at 1:100 dilution and α-tubulin Mouse Monoclonal Antibody (Cat. No. LF209) at 1:100 dilution
Secondary antibodies: Goat anti-Rabbit (488) at 1:1,000 dilution (shown in green) and Goat anti-Mouse (555) at 1:1,000 dilution (shown in red)
Nuclei were stained with DAPI (shown in blue).



Western Blot - Anti-CDK1 Rabbit mAb [64L56J82]
All lanes: R015095 at 1:5,000 dilution
Lane 1: HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysates
Lysates/proteins at 10 µg per lane.
Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP Conjugated (Cat. No. LF102) at 1:5,000 dilution
Predicted band size: 34 kDa
Observed band size: 34 kDa
Developed using the ECL technique (Cat. No. SQ201).



Immunohistochemistry - Anti-CDK1 Rabbit mAb [64L56J82]
Sample: Paraformaldehyde-fixed, paraffin embedded human breast cancer tissue
Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.
Primary antibody: R015095 at 1:3,000 dilution
Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP conjugated at 1:1,000 dilution
DAB was used as the chromogen.
Counter stained with hematoxylin.
Positive/negative staining were presented.
Only the secondary antibody was used as the negative control.



Immunohistochemistry - Anti-CDK1 Rabbit mAb [64L56J82]
Sample: Paraformaldehyde-fixed, paraffin embedded human rectal adenocarcinoma tissue
Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.
Primary antibody: R015095 at 1:3,000 dilution
Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP conjugated at 1:1,000 dilution
DAB was used as the chromogen.
Counter stained with hematoxylin.
Positive/negative staining were presented.
Only the secondary antibody was used as the negative control.