

Rabbit Cdc2 Polyclonal Antibody | anti-Cdc2 antibody

Cdc2 Polyclonal Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA28989	Rabbit	Human, Mouse, Rat	Western Blot, Immunohistochemistry, Immunofluorescence

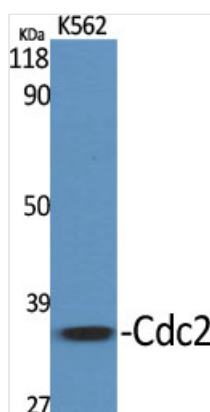
PRODUCT SYNONYMS

Cdc2; Polyclonal Antibody; Cdc2 Polyclonal Antibody; CDK1; CDC2; CDC28A; CDKN1; P34CDC2; Cyclin-dependent kinase 1; Cell division control protein 2 homolog; Cell division protein kinase 1; p34 protein kinase; anti-Cdc2 antibody

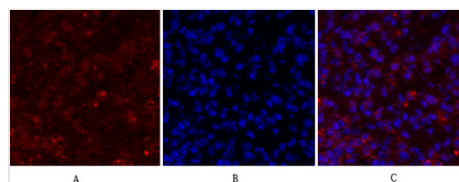
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Applicable Applications for anti-Cdc2 antibody	WB (Western Blot), IHC (Immunohistochemistry), IF (Immunofluorescence)
Preparation and Storage	Maintain refrigerated at 2-8 degree C for up to 2 weeks. For long term storage store at -20 degree C in small aliquots to prevent freeze-thaw cycles.

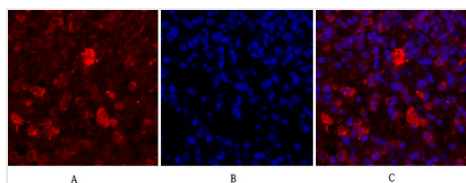
IMAGES


WB (Western Blot)

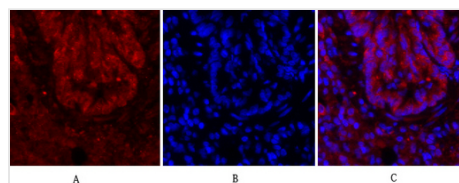
Dilution: IF: 1:50-200 Western Blot: 1/500 - 1/2000. ELISA: 1/10000. Not yet tested in other applications.


IF (Immunofluorescence)

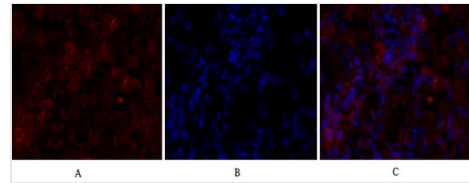
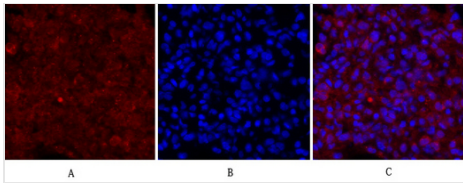
Dilution: IF: 1:50-200 Western Blot: 1/500 - 1/2000. ELISA: 1/10000. Not yet tested in other applications.


IF (Immunofluorescence)

Dilution: IF: 1:50-200 Western Blot: 1/500 - 1/2000. ELISA: 1/10000. Not yet tested in other applications.


IF (Immunofluorescence)

Dilution: IF: 1:50-200 Western Blot: 1/500 - 1/2000. ELISA: 1/10000. Not yet tested in other applications.



Application Data

Dilution: IF: 1:50-200 Western Blot: 1/500 - 1/2000. ELISA: 1/10000. Not yet tested in other applications.

Application Data

Dilution: IF: 1:50-200 Western Blot: 1/500 - 1/2000. ELISA: 1/10000. Not yet tested in other applications.

ADDITIONAL INFORMATION

Related Product Information for anti-Cdc2 antibody

Plays a key role in the control of the eukaryotic cell cycle by modulating the centrosome cycle as well as mitotic onset; promotes G2-M transition, and regulates G1 progress and G1-S transition via association with multiple interphase cyclins. Required in higher cells for entry into S-phase and mitosis. Phosphorylates PARVA/actopaxin, APC, AMPH, APC, BARD1, Bcl- xL/BCL2L1, BRCA2, CALD1, CASP8, CDC7, CDC20, CDC25A, CDC25C, CC2D1A, CENPA, CSNK2 proteins/CKII, FZR1/CDH1, CDK7, CEBPB, CHAMP1, DMD/dystrophin, EEF1 proteins/EF-1, EZH2, KIF11/EG5, EGFR, FANCG, FOS, GFAP, GOLGA2/GM130, GRASP1, UBE2A/hHR6A, HIST1H1 proteins/histone H1, HMGA1, HIVEP3/KRC, LMNA, LMNB, LMNC, LBR, LATS1, MAP1B, MAP4, MARCKS, MCM2, MCM4, MKLP1, MYB, NEFH, NFIC, NPC/nuclear pore complex, PITPNM1/NIR2, NPM1, NCL, NUCKS1, NPM1/numatrin, ORC1, PRKAR2A, EEF1E1/p18, EIF3F/p47, p53/TP53, NONO/p54NRRB, PAPOLA, PLEC/plectin, RB1, ul40/R2, RAB4A, RAP1GAP, RCC1, RPS6KB1/S6K1, KHDRBS1/SAM68, ESPL1, SKI, BIRC5/survivin, STIP1, TEX14, beta-tubulins, MAPT/TAU, NEDD1, VIM/vimentin, TK1, FOXO1, RUNX1/AML1, SAMHD1, SIRT2 and RUNX2. CDK1/CDC2-cyclin-B controls pronuclear union in interphase fertilized eggs. Essential for early stages of embryonic development. During G2 and early mitosis, CDC25A/B/C-mediated dephosphorylation activates CDK1/cyclin complexes which phosphorylate several substrates that trigger at least centrosome separation, Golgi dynamics, nuclear envelope breakdown and chromosome condensation. Once chromosomes are condensed and aligned at the metaphase plate, CDK1 activity is switched off by WEE1- and PKMYT1-mediated phosphorylation to allow sister chromatid separation, chromosome decondensation, reformation of the nuclear envelope and cytokinesis. Inactivated by PKR/EIF2AK2- and WEE1-mediated phosphorylation upon DNA damage to stop cell cycle and genome replication at the G2 checkpoint thus facilitating DNA repair. Reactivated after successful DNA repair through WIP1-dependent signaling leading to CDC25A/B/C- mediated dephosphorylation and restoring cell cycle progression. In proliferating cells, CDK1-mediated FOXO1 phosphorylation at the G2-M phase represses FOXO1 interaction with 14-3-3 proteins and thereby promotes FOXO1 nuclear accumulation and transcription factor activity, leading to cell death of postmitotic neurons. The phosphorylation of beta-tubulins regulates microtubule dynamics during mitosis. NEDD1 phosphorylation promotes PLK1-mediated NEDD1 phosphorylation and subsequent targeting of the gamma-tubulin ring complex (gTuRC) to the centrosome, an important step for spindle formation. In addition, CC2D1A phosphorylation regulates CC2D1A spindle pole localization and association with SCC1/RAD21 and centriole cohesion during mitosis. The phosphorylation of Bcl- xL/BCL2L1 after prolonged G2 arrest upon DNA damage triggers apoptosis. In contrast, CASP8 phosphorylation during mitosis prevents its activation by proteolysis and subsequent apoptosis. This phosphorylation occurs in cancer cell lines, as well as in primary breast tissues and lymphocytes. EZH2 phosphorylation promotes H3K27me3 maintenance and epigenetic gene silencing. CALD1 phosphorylation promotes Schwann cell migration during peripheral nerve regeneration. CDK1-cyclin-B complex phosphorylates NCKAP5L and mediates its dissociation from centrosomes during mitosis (PubMed:26549230).

NCBI AND UNIPROT INFORMATION

NCBI GI #	4502709
NCBI GeneID	983
NCBI Accession #	NP_001777.1
NCBI GenBank Nucleotide #	NM_001786.4
UniProt Accession #	P06493; O60764; A8K7C4; C9J497
Molecular Weight	34,095 Da
NCBI Official Full Name	cyclin-dependent kinase 1 isoform 1
NCBI Official Synonym Full Names	cyclin-dependent kinase 1

NCBI Official Symbol	CDK1
NCBI Official Synonym Symbols	CDC2; CDC28A; P34CDC2
NCBI Protein Information	cyclin-dependent kinase 1; p34 protein kinase; cell cycle controller CDC2; cell division protein kinase 1; cell division control protein 2 homolog; cell division cycle 2, G1 to S and G2 to M
UniProt Protein Name	Cyclin-dependent kinase 1
UniProt Gene Name	CDK1
UniProt Synonym Gene Names	CDC2; CDC28A; CDKN1; P34CDC2; CDK1
UniProt Entry Name	CDK1_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com

Online datasheet: <https://www.aaabiotech.com/polyclonal/cdc2-antibody-western-blot-immunohistochemistry-immunofluorescence-elisa/28989>