

Product datasheet

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ARG66281 anti-CDK1 / CDC2 antibody

Package: 100 μl Store at: -20°C

Summary

Product Description Rabbit Polyclonal antibody recognizes CDK1 / CDC2

Tested Reactivity Hu

Predict Reactivity Ms, Rat

Tested Application ICC/IF, IHC-P, WB

Specificity The antibody detects endogenous level of total CDC2 protein.

Host Rabbit

Clonality Polyclonal

Isotype IgG

Target Name CDK1 / CDC2

Species Human

Immunogen KLH-conjugated synthetic peptide around aa. 13-17 (GTYGV) of Human CDC2.

Conjugation Un-conjugated

Alternate Names CDK1; Cyclin Dependent Kinase 1; CDC28A; CDC2; Cell Division Cycle 2, G1 To S And G2 To M; Cell

Division Control Protein 2 Homolog; Cell Division Protein Kinase 1; Cyclin-Dependent Kinase 1; P34

Protein Kinase; P34CDC2; Cell Cycle Controller CDC2; EC 2.7.11.22; EC 2.7.11.23; CDKN1

Application Instructions

Application table	Application	Dilution
	ICC/IF	1:100 - 1:200
	IHC-P	1:50 - 1:100
	WB	1:500 - 1:1000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

Properties

Form Liquid

Purification Affinity purification with immunogen.

Buffer PBS (pH 7.4), 150mM NaCl, 0.02% Sodium azide and 50% Glycerol.

Preservative 0.02% Sodium azide

Stabilizer 50% Glycerol

Concentration 1 mg/ml

Storage instruction For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol CDK1

Gene Full Name Cyclin Dependent Kinase 1

Background The protein encoded by this gene is a member of the Ser/Thr protein kinase family. This protein is a

catalytic subunit of the highly conserved protein kinase complex known as M-phase promoting factor (MPF), which is essential for G2/M phase transitions of eukaryotic cell cycle. Mitotic cyclins stably associate with this protein and function as regulatory subunits. The kinase activity of this protein is controlled by cyclin accumulation and destruction through the cell cycle. The phosphorylation and dephosphorylation of this protein also play important regulatory roles in cell cycle control. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by

RefSeq, May 2023]

Function 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 via association with multiple interphase cyclins. [UniProt]

Research Area Cell Biology and Cellular Response antibody; Gene Regulation antibody; Neuroscience antibody

Calculated Mw 34 kDa

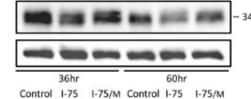
PTM Acetylation, Isopeptide bond, Phosphoprotein, Ubl conjugation. [UniProt]

Cellular Localization Cytoplasm, Cytoskeleton, Mitochondrion, Nucleus. [UniProt]

Images

CDK1

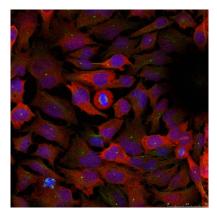
Tubulin



ARG66281 anti-CDK1 / CDC2 antibody WB image

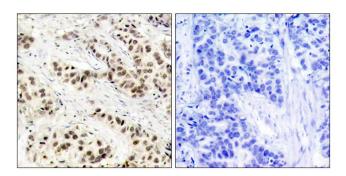
Western blot: HK2 stained with ARG66281 anti-CDK1 / CDC2 antibody.

From Hsing-Yu Chen et al. Int J Mol Sci (2023), <u>doi:</u> 10.3390/ijms241310945, Fig. 4A.



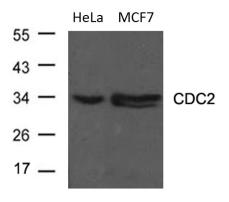
ARG66281 anti-CDK1 / CDC2 antibody ICC/IF image

Immunofluorescence: Methanol-fixed HeLa cells stained with ARG66281 anti-CDK1 / CDC2 antibody.



ARG66281 anti-CDK1 / CDC2 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human breast carcinoma tissue stained with ARG66281 anti-CDK1 / CDC2 antibody (left) or the same antibody pre-incubated with blocking peptide (right).



ARG66281 anti-CDK1 / CDC2 antibody WB image

Western blot: HeLa and MCF7 cell lysates stained with ARG66281 anti-CDK1 / CDC2 antibody.