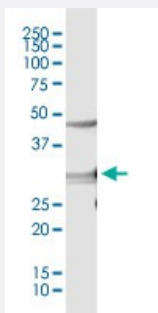


# CDC2 monoclonal antibody (M01), clone 1A4-1A9

Catalog # H00000983-M01

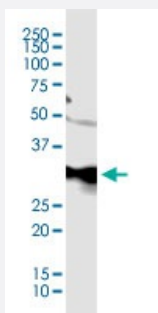
Size 100 ug

## Applications



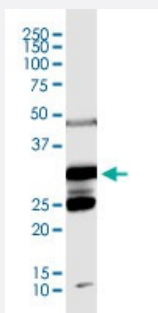
### Western Blot (Cell lysate)

CDC2 monoclonal antibody (M01), clone 1A4-1A9. Western Blot analysis of CDC2 expression in A-549.



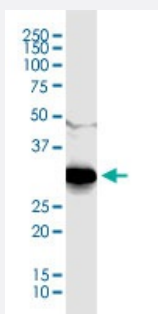
### Western Blot (Cell lysate)

CDC2 monoclonal antibody (M01), clone 1A4-1A9. Western Blot analysis of CDC2 expression in 293.



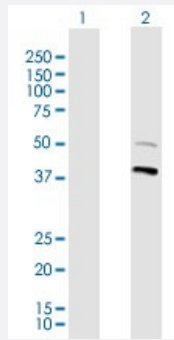
### Western Blot (Cell lysate)

CDC2 monoclonal antibody (M01), clone 1A4-1A9. Western Blot analysis of CDC2 expression in HL-60.



### Western Blot (Cell lysate)

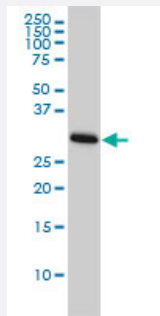
CDC2 monoclonal antibody (M01), clone 1A4-1A9. Western Blot analysis of CDC2 expression in Jurkat.



## Western Blot (Cell lysate)

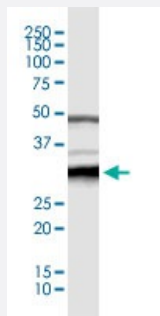
Lane 1: CDC2 monoclonal antibody (M01)(Cat # H00000983-M01) , clone 1A4-1A9. Western Blot analysis of CDC2 expression in NIH/3T3 (34.095 KDa).

Lane 2: ACTB monoclonal antibody(M01)(Cat # H00000060-M01) , clone 3G4-F9 Western Blot in NIH/3T3 ( 41.73kDa ) used as specificity and loading control.



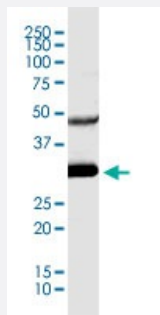
## Western Blot (Cell lysate)

CDC2 monoclonal antibody (M01), clone 1A4-1A9 Western Blot analysis of CDC2 expression in HeLa ( Cat # L013V1 ).



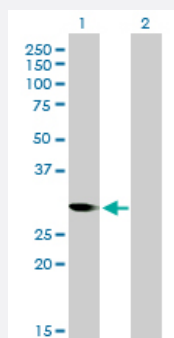
## Western Blot (Cell lysate)

CDC2 monoclonal antibody (M01), clone 1A4-1A9. Western Blot analysis of CDC2 expression in MCF-7.



## Western Blot (Cell lysate)

CDC2 monoclonal antibody (M01), clone 1A4-1A9. Western Blot analysis of CDC2 expression in Raji.



## Western Blot (Transfected lysate)

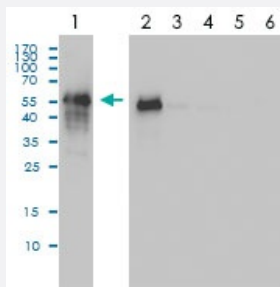
Western Blot analysis of CDC2 expression in transfected 293T cell line by CDC2 monoclonal antibody (M01), clone 1A4-1A9.

Lane 1: CDC2 transfected lysate(34.1 KDa).

Lane 2: Non-transfected lysate.

## Western Blot (Recombinant protein)

Western Blot analysis of CDC2 expression in recombinant protein by CDC2 monoclonal antibody (M01), clone 1A4-1A9.



Lane 1: CDC2 Protein (0.2 ug).

Lane 2: CDK2 Protein (0.2 ug).

Lane 3: CDK3 Protein (0.2 ug).

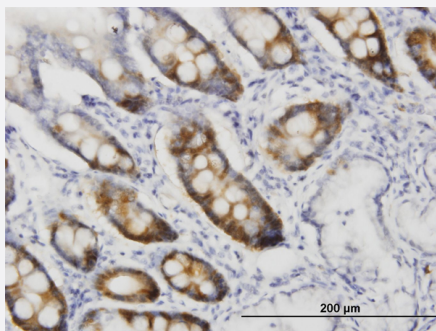
Lane 4: CDK4 Protein (0.2 ug).

Lane 5: CDK5 Protein (0.2 ug).

Lane 6: CDK6 Protein (0.2 ug).

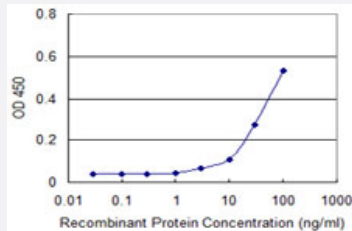
## Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunoperoxidase of monoclonal antibody to CDC2 on formalin-fixed paraffin-embedded human small Intestine. [antibody concentration 0.3 ug/ml]



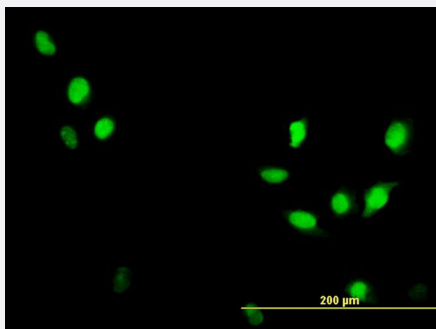
## Sandwich ELISA (Recombinant protein)

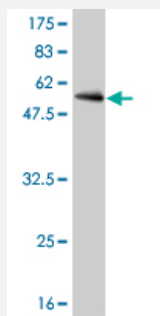
Detection limit for recombinant GST tagged CDC2 is approximately 30ng/ml as a capture antibody.



## Immunofluorescence

Immunofluorescence of monoclonal antibody to CDC2 on HeLa cell. [antibody concentration 10 ug/ml]





Western Blot detection against Immunogen (58.41 KDa) .

## Specification

<b>Product Description</b>	Mouse monoclonal antibody raised against a full length recombinant CDC2.
<b>Immunogen</b>	CDC2 (AAH14563, 1 a.a. ~ 297 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
<b>Sequence</b>	MEDYTKIEKIGEGTYGVVYKGRHKTTGQVVAMKKIRLESEEEGVPSTAIREISLLKELRHPNIVSLQD VLMQDSRLYLIFEFLSMDLK KYLDSIPPGQYMDSSLVKS YLYQILQGIVFCHSRRVLHRDLKPQNLLI DDKGTIKLADFG LARAFGIPIRVYTHEV VTLWYRSPEVLLGSARYSTPVDIWSIGTIFAE LATKKPLFH GDSEIDQLFRIFRALGTPNNEVWPEVESLQDYKNTFPKWKPGSLASHVKNLDENGLDLLSKMLIY DPAKRISGKMALNHPYFNDLDN QIKKM
<b>Host</b>	Mouse
<b>Reactivity</b>	Human
<b>Isotype</b>	IgG1 Kappa
<b>Quality Control Testing</b>	Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (58.41 KDa) .
<b>Storage Buffer</b>	In 1x PBS, pH 7.4
<b>Storage Instruction</b>	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

## Applications

### ● Western Blot (Cell lysate)

CDC2 monoclonal antibody (M01), clone 1A4-1A9. Western Blot analysis of CDC2 expression in A-549.

[Protocol Download](#)

- Western Blot (Cell lysate)

CDC2 monoclonal antibody (M01), clone 1A4-1A9. Western Blot analysis of CDC2 expression in 293.

[Protocol Download](#)

- Western Blot (Cell lysate)

CDC2 monoclonal antibody (M01), clone 1A4-1A9. Western Blot analysis of CDC2 expression in HL-60.

[Protocol Download](#)

- Western Blot (Cell lysate)

CDC2 monoclonal antibody (M01), clone 1A4-1A9. Western Blot analysis of CDC2 expression in Jurkat.

[Protocol Download](#)

- Western Blot (Cell lysate)

Lane 1: CDC2 monoclonal antibody (M01)(Cat # H00000983-M01) , clone 1A4-1A9. Western Blot analysis of CDC2 expression in NIH/3T3 (34.095 KDa). Lane 2: ACTB monoclonal antibody(M01)(Cat # H00000060-M01) , clone 3G4-F9 Western Blot in NIH/3T3 ( 41.73kDa ) used as specificity and loading control.

[Protocol Download](#)

- Western Blot (Cell lysate)

CDC2 monoclonal antibody (M01), clone 1A4-1A9 Western Blot analysis of CDC2 expression in Hela ( Cat # L013V1 ).

[Protocol Download](#)

- Western Blot (Cell lysate)

CDC2 monoclonal antibody (M01), clone 1A4-1A9. Western Blot analysis of CDC2 expression in MCF-7.

[Protocol Download](#)

- Western Blot (Cell lysate)

CDC2 monoclonal antibody (M01), clone 1A4-1A9. Western Blot analysis of CDC2 expression in Raji.

[Protocol Download](#)

- Western Blot (Transfected lysate)

Western Blot analysis of CDC2 expression in transfected 293T cell line by CDC2 monoclonal antibody (M01), clone 1A4-1A9.

Lane 1: CDC2 transfected lysate(34.1 KDa).

Lane 2: Non-transfected lysate.

[Protocol Download](#)

- Western Blot (Recombinant protein)

Western Blot analysis of CDC2 expression in recombinant protein by CDC2 monoclonal antibody (M01), clone 1A4-1A9.

Lane 1: CDC2 Protein (0.2 ug).

Lane 2: CDK2 Protein (0.2 ug).

Lane 3: CDK3 Protein (0.2 ug).

Lane 4: CDK4 Protein (0.2 ug).

Lane 5: CDK5 Protein (0.2 ug).

Lane 6: CDK6 Protein (0.2 ug).

[Protocol Download](#)

- Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunoperoxidase of monoclonal antibody to CDC2 on formalin-fixed paraffin-embedded human small Intestine. [antibody concentration 0.3 ug/ml]

[Protocol Download](#)

- Sandwich ELISA (Recombinant protein)

Detection limit for recombinant GST tagged CDC2 is approximately 30ng/ml as a capture antibody.

[Protocol Download](#)

- ELISA

- Immunofluorescence

Immunofluorescence of monoclonal antibody to CDC2 on HeLa cell. [antibody concentration 10 ug/ml]

## Gene Info — CDC2

Entrez GeneID [983](#)

GeneBank Accession# [BC014563](#)

Protein Accession# [AAH14563](#)

Gene Name CDC2

Gene Alias CDC28A, CDK1, DKFZp686L20222, MGC111195

Gene Description cell division cycle 2, G1 to S and G2 to M

Omim ID [116940](#)

Gene Ontology [Hyperlink](#)

**Gene Summary**

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 G1/S and 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]

**Other Designations**

OTTHUMP00000019660|cell cycle controller CDC2|cell division control protein 2 homolog|cell division cycle 2 protein|cyclin-dependent kinase 1|p34 protein kinase

**Pathway**

- [Cell cycle](#)
- [Gap junction](#)
- [p53 signaling pathway](#)

**Disease**

- [Alzheimer disease](#)
- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Dementia](#)
- [Genetic Predisposition to Disease](#)
- [Lung Neoplasms](#)
- [Pulmonary Disease](#)