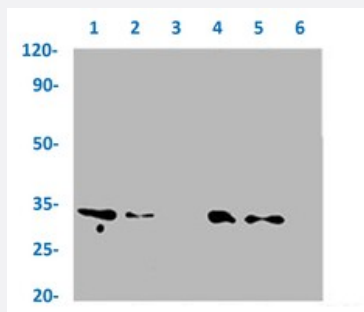


RecomAb™

# CDK1/CDK2/CDK3 (phospho T14) recombinant monoclonal antibody, clone 4C12

Catalog # RAB04265      Size 100 uL

## Applications



## Western Blot

Western blot analysis of Lane 1: HeLa whole cell lysate (treated with Calyculin A 100 nM/60 mins), Lane 2: HeLa whole cell lysate (treated with EGF 100 ng/mL/20 mins), Lane 3: HeLa whole cell lysate (not treated), Lane 4: A549 whole cell lysate (treated with Calyculin A 100 nM/60 mins), Lane 5: A549 whole cell lysate (treated with EGF 100 ng/mL/20 mins) and Lane 6: A549 whole cell lysate (not treated) with CDK1/CDK2/CDK3 (phospho T14) recombinant monoclonal antibody, clone 4C12 (Cat # RAB04265).

## Specification

<b>Product Description</b>	Rabbit recombinant monoclonal antibody raised against human CDK1/CDK2/C.DK3.
<b>Antibody Species</b>	Rabbit
<b>Immunogen</b>	Original antibody is raised against a synthetic phosphopeptide corresponding to residues surrounding T14 of human CDK1/CDK2/CDK3.
<b>Theoretical MW (kDa)</b>	Calculated MW: 34 kD
<b>Reactivity</b>	Human
<b>Form</b>	Liquid
<b>Purification</b>	Affinity chromatography
<b>Isotype</b>	IgG

<b>Recommend Usage</b>	ELISA Western Blot (1:500-1:5000) The optimal working dilution should be determined by the end user.
<b>Storage Buffer</b>	In PBS, pH7.4 (150mM NaCl, 50% glycerol and 0.02% sodium azide)
<b>Storage Instruction</b>	Store at -20 °C or -80 °C. Aliquot to avoid repeated freezing and thawing.
<b>Note</b>	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

## Applications

- Western Blot

Western blot analysis of Lane 1: Hela whole cell lysate (treated with Calyculin A 100 nM/60 mins), Lane 2: Hela whole cell lysate (treated with EGF 100 ng/mL/20 mins), Lane 3: Hela whole cell lysate (not treated), Lane 4: A549 whole cell lysate (treated with Calyculin A 100 nM/60 mins), Lane 5: A549 whole cell lysate (treated with EGF 100 ng/mL/20 mins) and Lane 6: A549 whole cell lysate (not treated) with CDK1/CDK2/CDK3 (phospho T14) recombinant monoclonal antibody, clone 4C12 (Cat # RAB04265).

- Enzyme-linked Immunoabsorbent Assay

## Gene Info — CDC2

<b>Entrez GeneID</b>	<a href="#">983</a>
<b>Protein Accession#</b>	<a href="#">P06493;P24941;Q00526</a>
<b>Gene Name</b>	CDC2
<b>Gene Alias</b>	CDC28A, CDK1, DKFZp686L20222, MGC111195
<b>Gene Description</b>	cell division cycle 2, G1 to S and G2 to M
<b>Omim ID</b>	<a href="#">116940</a>
<b>Gene Ontology</b>	<a href="#">Hyperlink</a>

### 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

## Gene Info — CDK2

#### Entrez GeneID

[1017](#)

#### Protein Accession#

[P06493;P24941;Q00526](#)

#### Gene Name

CDK2

#### Gene Alias

p33(CDK2)

#### Gene Description

cyclin-dependent kinase 2

#### Omim ID

[116953](#)

#### Gene Ontology

[Hyperlink](#)

### Gene Summary

The protein encoded by this gene is a member of the Ser/Thr protein kinase family. This protein kinase is highly similar to the gene products of *S. cerevisiae* cdc28, and *S. pombe* cdc2. It is a catalytic subunit of the cyclin-dependent protein kinase complex, whose activity is restricted to the G1-S phase, and essential for cell cycle G1/S phase transition. This protein associates with and regulated by the regulatory subunits of the complex including cyclin A or E, CDK inhibitor p21Cip1 (CDKN1A) and p27Kip1 (CDKN1B). Its activity is also regulated by its protein phosphorylation. Two alternatively spliced variants and multiple transcription initiation sites of this gene have been reported. [provided by RefSeq]

### Other Designations

cdc2-related protein kinase|cell division kinase 2|p33 protein kinase

## Gene Info — CDK3

#### Entrez GeneID

[1018](#)

#### Protein Accession#

[P06493;P24941;Q00526](#)

#### Gene Name

CDK3

Gene Alias	-
Gene Description	cyclin-dependent kinase 3
Omim ID	<a href="#">123828</a>
Gene Ontology	<a href="#">Hyperlink</a>
Gene Summary	This gene encodes a member of the cyclin-dependent protein kinase family. The protein promote s entry into S phase, in part by activating members of the E2F family of transcription factors. The protein also associates with cyclin C and phosphorylates the retinoblastoma 1 protein to promote exit from G0. [provided by RefSeq
Other Designations	-

## Pathway

- [Cell cycle](#)
- [Cell cycle](#)
- [Gap junction](#)
- [p53 signaling pathway](#)
- [p53 signaling pathway](#)
- [Pathways in cancer](#)
- [Prostate cancer](#)
- [Small cell lung cancer](#)

## Disease

- [Alzheimer disease](#)
- [Azoospermia](#)
- [Breast cancer](#)
- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Breast Neoplasms](#)

- [Chromosome Aberrations](#)
- [Dementia](#)
- [Diabetes Mellitus](#)
- [Genetic Predisposition to Disease](#)
- [Genetic Predisposition to Disease](#)
- [Kidney Failure](#)
- [Lung Neoplasms](#)
- [Lymphoma](#)
- [Neoplasm Invasiveness](#)
- [Ovarian cancer](#)
- [Ovarian Neoplasms](#)
- [Pulmonary Disease](#)