

 $\textbf{RecomAb}^{\text{\tiny{TM}}}$

CDK1/CDK2 (phospho Thr14) recombinant monoclonal antibody, clone R06-1A5

Catalog # RAB01793 Size 100 uL

Applications



Western Blot

Western blot analysis of Lane1: HepG2, Lane2: U2OS and Lane3: U251 lysates with CDK1/CDK2 (phospho Thr14) recombinant monoclonal antibody, clone R06-1A5 (Cat # RAB01793).

Specification	
Product Description	Rabbit recombinant monoclonal antibody raised against human CDK1/CDK2.
Antibody Species	Rabbit
Immunogen	Original antibody is raised against a synthetic phosphopeptide corresponding to residues surroundin g Thr14 of human CDK1/CDK2.
Theoretical MW (kDa)	Calculated MW: 34 kD
Reactivity	Human
Form	Liquid
Purification	Affinity purification
Isotype	lgG



Product Information

Recommend Usage	Immunohistochemistry (1:50-1/100) Immunoprecipitation (1:20) Western Blot (1:500-1:1000) The optimal working dilution should be determined by the end user.
Storage Buffer	In 50 mM Tris-Glycine, pH 7.4 (0.15 M NaCl, 40% Glycerol, 0.01% Sodium azide and 0.05% BSA)
Storage Instruction	Store at -20 °C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only.

Applications

Western Blot

Western blot analysis of Lane1: HepG2, Lane2: U2OS and Lane3: U251 lysates with CDK1/CDK2 (phospho Thr14) recombinant monoclonal antibody, clone R06-1A5 (Cat # RAB01793).

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

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



Product Information

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 f actor (MPF), which is essential for G1/S and G2/M phase transitions of eukaryotic cell cycle. Mitot ic 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 phos phorylation 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 GenelD	<u>1017</u>
Protein Accession#	P06493;P24941
Gene Name	CDK2
Gene Alias	p33(CDK2)
Gene Description	cyclin-dependent kinase 2
Omim ID	<u>116953</u>
Gene Ontology	<u>Hyperlink</u>
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 cata lytic 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 regul ated by the regulatory subunits of the complex including cyclin A or E, CDK inhibitor p21Cip1 (CD KN1A) and p27Kip1 (CDKN1B). Its activity is also regulated by its protein phosphorylation. Two a Iternatively spliced variants and multiple transcription initiation sites of this gene have been report ed. [provided by RefSeq
Other Designations	cdc2-related protein kinase cell devision kinase 2 p33 protein kinase

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