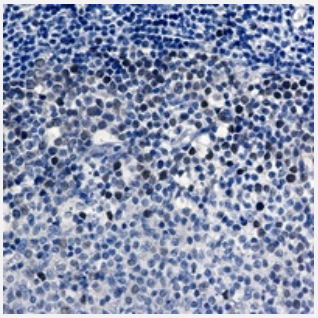
RecomAb™ Sm Size

# CDK2 recombinant monoclonal antibody

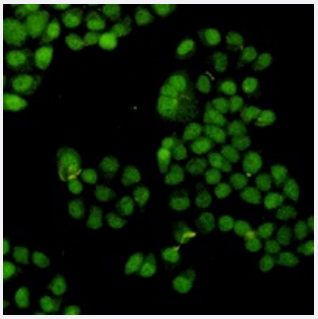
Catalog # RAB09077 Size 50 uL

## Applications



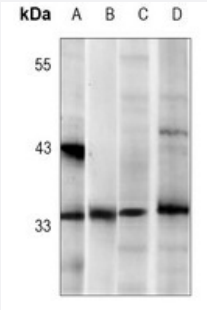
### Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunohistochemical analysis of human tonsil formalin fixed paraffin embedded tissue section using CDK2 recombinant monoclonal antibody (Cat # RAB09077). The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.108). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



### Immunofluorescence

Immunofluorescent analysis of HeLa cells with CDK2 recombinant monoclonal antibody (Cat # RAB09077). Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark.




### Western Blot (Cell lysate)

Western blot analysis of Jurkat (A), C6 (B), CHOK1 (C), Hela (D) whole cell lysates with CDK2 recombinant monoclonal antibody (Cat # RAB09077).

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## Specification

| | |
|---|---|
| **Product Description** | Rabbit recombinant monoclonal antibody raised against recombinant CDK2. |
| **Antibody Species** | Rabbit |
| **Immunogen** | Original antibody is raised against a synthetic peptide of human Cdk2. |
| **Theoretical MW (kDa)** | 35 |
| **Reactivity** | Hamster, Human, Rat |
| **Specificity** | Recognizes endogenous levels of CDK2 protein. |
| **Form** | Liquid |
| **Preparation Method** | Mammalian cell (HEK293) expression system |
| **Purification** | Immunogen affinity chromatography |
| **Isotype** | IgG |
| **Recommend Usage** | Immunocytochemistry (1:50-1:100)<br>Immunofluorescence (1:50-1:100)<br>Immunohistochemistry (1:50-1:100)<br>Immunoprecipitation(1:10-1:50)<br>Western Blot (1:500-1:1000) |
| **Storage Buffer** | In 50mM Tris-Glycine, pH 7.4 (0.15M NaCl, 50% Glycerol, 0.01% Sodium azide and 0.05% BSA) |
| **Storage Instruction** | Store at 4°C short term.<br>Aliquot and store at -20°C long term.<br>Avoid freeze-thaw cycles. |
| **Note** | This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only. |

## Applications

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

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- Western Blot (Cell lysate)

  Western blot analysis of Jurkat (A), C6 (B), CHOK1 (C), Hela (D) whole cell lysates with CDK2 recombinant monoclonal antibody (Cat # RAB09077).

## Gene Info — CDK2

| | |
|---|---|
| **Entrez GeneID** | 1017 |
| **Protein Accession#** | P24941 |
| **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 ki nase 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 lternatively 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
- p53 signaling pathway
- Pathways in cancer

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- Prostate cancer
- Small cell lung cancer

## Disease

- Azoospermia
- Breast cancer
- Breast Neoplasms
- Chromosome Aberrations
- Diabetes Mellitus
- Genetic Predisposition to Disease
- Kidney Failure
- Lymphoma
- Neoplasm Invasiveness
- Ovarian cancer
- Ovarian Neoplasms

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