# Mouse (monoclonal) Anti-cdk4 Unconjugated
## PRODUCT ANALYSIS SHEET

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| **Catalog Number:** | AHZ0202 |
| **Lot Number:** | See product label |
| **Quantity/Volume:** | 100 µg/0.5 mL |
| **Clone Number:** | DCS-31 |
| **Isotype:** | IgG1 (mouse) |
| **Form of Antibody:** | Purified immunoglobulin in 10mM phosphate buffered saline, pH 7.4, with 0.2% bovine serum albumin. |
| **Preservation:** | 0.09% sodium azide (Caution: sodium azide is a poisonous and hazardous substance. Handle with care and dispose of properly.) |
| **Purification:** | Purified from ascites by Protein G affinity chromatography. |
| **Immunogen:** | Purified recombinant cdk4 protein. |
| **Specificity:** | This antibody recognizes a protein of 34 kDa, identified as cyclin-dependent kinase-4 (cdk4, also known as $p34^{cdk4}$). Cyclin-dependent kinases (cdk) are the catalytic subunits of the cyclin/cdk complexes, which phosphorylate substrates on threonine/serine residues. Cdk4 associates with the D-type cyclins and is important in the progression of cells from the $G_1$-phase to the S-phase of the cell cycle. This antibody does not cross-react with other members of the cdk family. |
| **Species Reactivity:** | Human, mouse, and rat cdk4 protein. Other species were not tested. |
| **Applications:** | This antibody is suitable for use in immunoprecipitation (co-precipitates cyclin D; unbound cdk), Western blotting, immunofluorescence. |
| **Suggested Working Dilutions:** | For immunoprecipitation, use 2µg/mg of protein lysate; for Western blotting, 1-2 µg/mL is recommended; and for immunohistochemistry. |
| **Recommended Positive Control:** | MAD109, LS174T, or PC12 cells. |
| **Storage:** | Store at 2-8ºC. |
| **Expiration Date:** | Expires one year from date of receipt when stored as instructed. |
| **References:** | Depoortere, F., *et al.* (1998) A requirement for cyclin D3-cyclin-dependent kinase (cdk)-4 assembly in the cyclic adenosine monophosphate-dependent proliferation of thyrocytes. The Journal of Cell Biology 140(6):1427-1439.<br>Jadayel, D.M., *et al.* (1997) Potential role for concurrent abnormalities of the cyclin D1, $p16^{CDKN2}$ and $p15^{CDKN2B}$ genes in certain B cell non-Hodgkin's lymphomas. Functional studies in a cell line (Granta 519). Leukemia 11:64-72. |



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# CDK4 Monoclonal Antibody, Mouse (DCS-31)

(Novex®)

## Description

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| **Catalog Number** | **AHZ0202** |
| **Size** | **100 µg** |
| **List Price** | **CZK 8.250,00** |

This purified mouse anti-CDK4 monoclonal antibody (mAb) recognizes cyclin-dependent kinase-4 protein. CDK4 associates with the D-type cyclins and is important in the progression of cells from the G1-phase to the S-phase of the cell cycle. Mouse anti-CDK4 mAb does not cross-react with other members of the CDK family. Mouse anti-CDK4 mAb is suitable for use in applications such as western blotting, immunoprecipitation, and immunofluorescence.

**Antibody Specifications:**

- **Applications:** Validated applications for mouse anti-CDK4 monoclonal antibody are western blotting, immunoprecipitation and immunofluorescence.
- **Host Species and Isotype:** The host species and isotype of the anti-CDK4 monoclonal antibody is mouse IgG1.
- **Clone ID of Monoclonal Antibody (mAb):** The mouse anti-CDK4 monoclonal antibody clone is DCS-31.
- **Reactivity:** Detects human, mouse, and rat CDK4 protein.
- **Product Size:** Mouse anti-CDK4 monoclonal antibody is available in a 100 µg pack size.

This antibody recognizes a protein of 34 kDa, identified as cyclin-dependent kinase-4 (cdk4, also known as p34cdk4). Cyclin-dependent kinases (cdk) are the catalytic subunits of the cyclin/cdk complexes, which phosphorylate substrates on threonine/serine residues. Cdk4 associates with the D-type cyclins and is important in the progression of cells from the G1-phase to the S-phase of the cell cycle. This antibody does not cross-react with other members of the cdk family.

## Specifications

### General Specifications

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| **Reactivity:** | Rat,<br>Mouse,<br>Human |
| **Validated Application:** | Immunohistochemistry,<br>Immunofluorescence,<br>Kinase Assay,<br>Western Blot,<br>Co-Immunoprecipitation |
| **Host:** | Mouse |
| **Clonality:** | Monoclonal |
| **Clone ID:** | DCS-31 |
| **Target Gene:** | cdk4 |
| **Gene ID:** | 1019 |
| **Label or Dye:** | Unconjugated |
| **Purification:** | Purified |
| **Product Size:** | 100 µg |
| **Shipping Condition:** | Approved for shipment on Wet or Dry Ice |
| **Regulatory Statement:** | For Research Use Only. Not |

### Documents

**Manuals & Protocols**

AHZ0202

for use in diagnostic procedures.

**Material Safety Data Sheets (MSDS)**

AHZ0202

**Certificates of Analysis (COA)**

**Additional Information**

**Citations & References (3)**

- **MDM2 and CDK4 immunohistochemical coexpression in high-grade osteosarcoma: correlation with a dedifferentiated subtype.**

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| Authors | Yoshida A, Ushiku T, Motoi T, Beppu Y, Fukayama M, Tsuda H, Shibata T, |
| Journal | Am J Surg Pathol (2012) 36:423-431 |
| Product Usage | IHC (1:200), formalin-fixed, paraffin-embedded human osteosarcomas |
| ID: | PN131781 |

**Suppressor of cytokine signaling (SOCS)-1 is expressed in human prostate cancer and exerts growth-inhibitory function through down-regulation of cyclins and cyclin-dependent kinases.**

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| Authors | Neuwirt H, Puhr M, Santer FR, Susani M, Doppler W, Marcias G, Rauch V, Brugger M, Hobisch A, Kenner L, Culig Z |
| Journal | Am J Pathol 2009 (174):1921-1930 |
| ID: | PN129407 |

**Reproducibility of MDM2 and CDK4 staining in soft tissue tumors.**

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| Authors | Binh MB, Garau XS, Guillou L, Aurias A, Coindre JM |
| Journal | Am J Clin Pathol (2006) 125:693-697 |
| Product Usage | IHC (MDM2,1:50-1:100; CDK4,1:100-1:200), FFPE, tissue microarrays and 4 µm sections of human soft tissue tumors |
| ID: | PN129400 |