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# Cyclin D1

Rabbit Monoclonal antibody(Mab)
Catalog # AD80273

## Product Information

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| **Application** | IHC-P |
| **Primary Accession** | P24385 |
| **Reactivity** | Human |
| **Host** | Rabbit |
| **Clonality** | Monoclonal |
| **Clone Names** | 332G4S4 |
| **Calculated MW** | 33729 |

## Additional Information

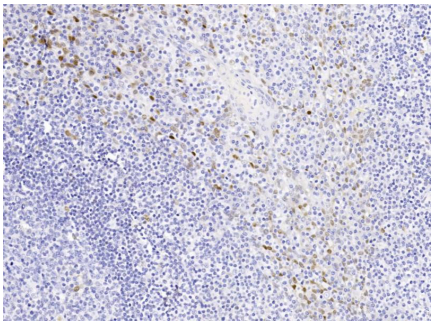
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| **Gene ID** | 595 |
| **Gene Name** | CCND1 |
| **Other Names** | G1/S-specific cyclin-D1, B-cell lymphoma 1 protein, BCL-1, BCL-1 oncogene, PRAD1 oncogene, CCND1 {ECO:0000303\|PubMed:8204893, ECO:0000312\|HGNC:HGNC:1582} |
| **Dilution** | IHC-P~~Ready-to-use |
| **Storage** | Maintain refrigerated at 2-8°C. |
| **Precautions** | Cyclin D1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures. |

## Protein Information

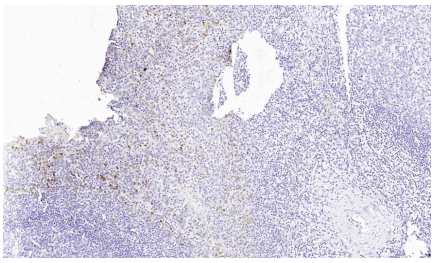
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|---|---|
| **Name** | CCND1 {ECO:0000303\|PubMed:8204893, ECO:0000312\|HGNC:HGNC:1582} |
| **Function** | Regulatory component of the cyclin D1-CDK4 (DC) complex that phosphorylates and inhibits members of the retinoblastoma (RB) protein family including RB1 and regulates the cell-cycle during G(1)/S transition (PubMed:1827756, PubMed:1833066, PubMed:19412162, PubMed:33854235, PubMed:8114739, PubMed:8302605). Phosphorylation of RB1 allows dissociation of the transcription factor E2F from the RB/E2F complex and the subsequent transcription of E2F target genes which are responsible for the progression through the G(1) phase (PubMed:1827756, PubMed:1833066, PubMed:19412162, PubMed:8114739, PubMed:8302605). Hypophosphorylates RB1 in early G(1) phase (PubMed:1827756, PubMed:1833066, PubMed:19412162, PubMed:8114739, PubMed:8302605). Cyclin D-CDK4 complexes are major integrators of various mitogenenic and antimitogenic signals (PubMed:1827756, PubMed:1833066, PubMed:19412162, PubMed:8302605). Also a substrate for SMAD3, phosphorylating SMAD3 in a cell-cycle-dependent manner and repressing its |

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| | transcriptional activity (PubMed:15241418). Component of the ternary complex, cyclin D1/CDK4/CDKN1B, required for nuclear translocation and activity of the cyclin D-CDK4 complex (PubMed:9106657). Exhibits transcriptional corepressor activity with INSM1 on the NEUROD1 and INS promoters in a cell cycle-independent manner (PubMed:16569215, PubMed:18417529). |
| **Cellular Location** | Nucleus. Cytoplasm. Nucleus membrane. Note=Cyclin D-CDK4 complexes accumulate at the nuclear membrane and are then translocated to the nucleus through interaction with KIP/CIP family members |

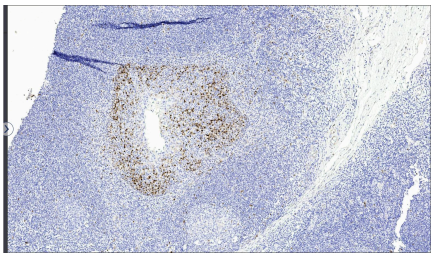
## Images



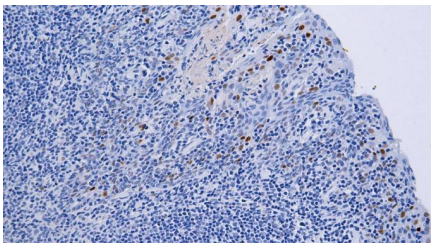
Immunohistochemical analysis of formalin-fixed and paraffin-embedded human tonsil tissue was performed with Cyclin D1 primary antibody, followed by peroxidase-conjugated secondary antibody and DAB staining.



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Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.