

# Cyclin D1 (phospho Thr286) Polyclonal Antibody

Catalog # AP67229

## Product Information

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<b>Application</b>	WB, IHC-P
<b>Primary Accession</b>	<a href="#">P24385</a>
<b>Reactivity</b>	Human, Mouse, Rat
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Calculated MW</b>	33729

## Additional Information

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<b>Gene ID</b>	595
<b>Other Names</b>	CCND1; BCL1; PRAD1; G1/S-specific cyclin-D1; B-cell lymphoma 1 protein; BCL-1; BCL-1 oncogene; PRAD1 oncogene
<b>Dilution</b>	WB--Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/10000. Not yet tested in other applications. IHC-P--N/A
<b>Format</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
<b>Storage Conditions</b>	-20°C

## Protein Information

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<b>Name</b>	CCND1 {ECO:0000303   PubMed:8204893, ECO:0000312   HGNC:HGNC:1582}
<b>Function</b>	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: <a href="#">1827756</a> , PubMed: <a href="#">1833066</a> , PubMed: <a href="#">19412162</a> , PubMed: <a href="#">33854235</a> , PubMed: <a href="#">8114739</a> , PubMed: <a href="#">8302605</a> ). 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: <a href="#">1827756</a> , PubMed: <a href="#">1833066</a> , PubMed: <a href="#">19412162</a> , PubMed: <a href="#">8114739</a> , PubMed: <a href="#">8302605</a> ). Hypophosphorylates RB1 in early G(1) phase (PubMed: <a href="#">1827756</a> , PubMed: <a href="#">1833066</a> , PubMed: <a href="#">19412162</a> , PubMed: <a href="#">8114739</a> , PubMed: <a href="#">8302605</a> ). Cyclin D-CDK4 complexes are major integrators of various mitogenic and antimitogenic signals (PubMed: <a href="#">1827756</a> , PubMed: <a href="#">1833066</a> , PubMed: <a href="#">19412162</a> , PubMed: <a href="#">8302605</a> ). Also a substrate for SMAD3, phosphorylating SMAD3 in a cell-cycle-dependent manner and repressing its transcriptional activity (PubMed: <a href="#">15241418</a> ). 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](#)).

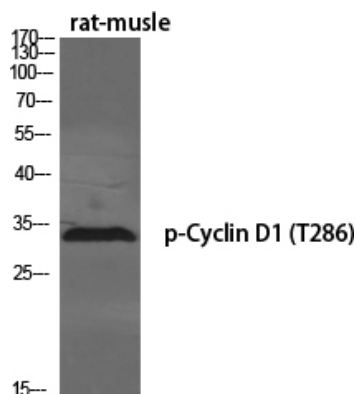
### Cellular Location

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

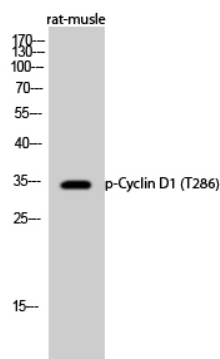
## Background

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. 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. Hypophosphorylates RB1 in early G(1) phase. Cyclin D-CDK4 complexes are major integrators of various mitogenic and antimitogenic signals. Also substrate for SMAD3, phosphorylating SMAD3 in a cell-cycle-dependent manner and repressing its transcriptional activity. Component of the ternary complex, cyclin D1/CDK4/CDKN1B, required for nuclear translocation and activity of the cyclin D-CDK4 complex. Exhibits transcriptional corepressor activity with INSM1 on the NEUROD1 and INS promoters in a cell cycle-independent manner.

## Images



Western Blot analysis of various cells using Phospho-Cyclin D1 (T286) Polyclonal Antibody diluted at 1 : 500



Western Blot analysis of rat-muscle cells using Phospho-Cyclin D1 (T286) Polyclonal Antibody diluted at 1 : 500

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