

## Purified anti-Cyclin D1 Antibody

<b>Catalog# / Size</b>	681902 / 100 µg
<b>Clone</b>	DCS-6
<b>Regulatory Status</b>	RUO
<b>Other Names</b>	B-Cell Lymphoma 1 Protein, B-Cell CLL/Lymphoma 1, PRAD1 Oncogene, G1/S-Specific Cyclin D1, D11S287E, U21B31, PRAD1, BCL1
<b>Isotype</b>	Mouse IgG2a, κ
<b>Description</b>	Cyclin D1, which forms a complex with CDK4 and CDK6, plays central roles in cell cycle transition from G1 to S phase. It also participates in the induction of cellular migration and invasion, enhancement of angiogenesis, inhibition of mitochondrial metabolism, regulation of transcription factor signaling via DNA binding, induction of chromosomal instability, enhancement of DNA damage sensing, and DNA damage repair. The activation of the cyclin D1 oncogene is a major driver of multiple types of human tumors including breast and squamous cell cancers, B-cell lymphoma, myeloma, and parathyroid adenoma.

### Product Details

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<b>Reactivity</b>	Human, Mouse, Rat
<b>Antibody Type</b>	Monoclonal
<b>Host Species</b>	Mouse
<b>Immunogen</b>	Full length recombinant human Cyclin D1
<b>Formulation</b>	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
<b>Preparation</b>	The antibody was purified by affinity chromatography.
<b>Concentration</b>	0.5 mg/ml
<b>Storage &amp; Handling</b>	The antibody solution should be stored undiluted between 2°C and 8°C.
<b>Application</b>	<a href="#">WB - Quality tested</a> <a href="#">IHC-P - Reported in the literature. not verified in house</a>
<b>Recommended Usage</b>	Each lot of this antibody is quality control tested by <a href="#">Western blotting</a> . For Western blotting, the suggested use of this reagent is 0.5 - 2.0 µg per ml. It is recommended that the reagent be titrated for optimal performance for each application.
<b>Application References</b> (PubMed link indicates BioLegend citation)	1. Garcia Lozano MC, <i>et al.</i> 2006. <i>An. Otorrinolaringol Ibero Am.</i> 33:257. 2. Lonardo F, <i>et al.</i> 1999. <i>Cancer Res.</i> 10:2470-6. 3. Pignataro L, <i>et al.</i> 1998. <i>Anticancer Res.</i> 18:1287.
<b>Product Citations</b>	1. Kozono S, <i>et al.</i> 2018. <i>Nat Commun.</i> 2:50625. <a href="#">PubMed</a>
<b>RRID</b>	AB_2566566 (BioLegend Cat. No. 681902)

### Antigen Details

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<b>Structure</b>	295 amino acids with a predicted molecular weight of approximately 34 kD.
<b>Distribution</b>	Nucleus and cytosol.
<b>Function</b>	Cyclin D1 plays central roles in cell cycle transition from G1 to S phase.

<b>Interaction</b>	FBXO4, CDK4, CDK6, CCND1/CDK4/CDKN1B, CDKN1B, UHRF2, USP2, INSM1, the interaction competes with the binding of CCND1 to CDK4 during cell cycle progression and inhibits CDK4 activity.
<b>Biology Area</b>	Angiogenesis, Cell Biology, Cell Cycle/DNA Replication, Cell Motility/Cytoskeleton/Structure, Chromatin Remodeling/Epigenetics, DNA Repair/Replication, Mitochondrial Function, Signal Transduction, Transcription Factors, Ubiquitin/Protein Degradation
<b>Antigen References</b>	<ol style="list-style-type: none"> <li>1. Garcia Lozano MC, <i>et al.</i> 2006. <i>An. Otorrinolaringol Ibero Am.</i> 33:257.</li> <li>2. Lonardo F, <i>et al.</i> 1999. <i>Cancer Res.</i> 59:2470-6.</li> <li>3. Pignataro L, <i>et al.</i> 1998. <i>Anticancer Res.</i> 18:1287.</li> <li>4. Darzynkiewicz Z, <i>et al.</i> 2015. <i>Oncotarget.</i> 6:11735.</li> <li>5. Lamba Saini M, <i>et al.</i> 2015. <i>Diagn. Pathol.</i> 10:32.</li> <li>6. Casimiro MC, <i>et al.</i> 2014. <i>Expert Opin. Investig. Drugs</i> 23:295.</li> <li>7. Pestell RG. 2013. <i>Am. J. Pathol.</i> 183:3.</li> </ol>
<b>Gene ID</b>	<a href="#">595</a>

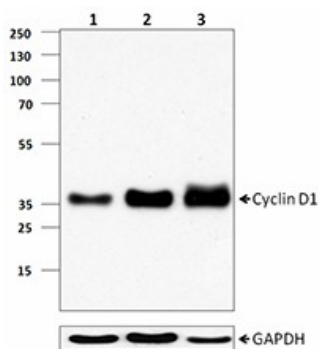
## Other Formats

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Purified anti-Cyclin D1

## Product Data

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Western blot analysis of cell lysates from HeLa (lane 1), MCF-7 (lane 2), and NIH3T3 (lane 3). Anti-Cyclin D1 antibody (clone DCS-6) was used, followed by HRP anti-mouse IgG antibody. GAPDH (clone poly6314) was used as loading control.

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