

## Basic Information

<b>Product Name</b>	Anti-Cyclin D1/CCND1 Antibody (Clone#DAD-3)	
<b>Gene Name</b>	CCND1	
<b>Source</b>	Rabbit	
<b>Clonality</b>	Monoclonal	
<b>Isotype</b>	IgG	
<b>Species Reactivity</b>	human, mouse, rat	
<b>Tested Application</b>	WB, IHC, ICC/IF, IP	
<b>Contents</b>	500 ug/ml; Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide, 0.4-0.5 mg/ml BSA and 50% glycerol.	
<b>Immunogen</b>	A synthesized peptide derived from human Cyclin D1	
<b>Concentration</b>	500 ug/ml	
<b>Purification</b>	Affinity-chromatography	
<b>Observed MW</b>	34 kDa	
<b>Dilution Ratios</b>	Western blot (WB):	1:500-2000
	Immunohistochemistry (IHC):	1:50-200
	Immunocytochemistry/Immunofluorescence (ICC/IF):	1:50-200
	ImmunoPrecipitation (IP):	1:20

## Storage

12 months from date of receipt, -20°C as supplied.

## Background Information

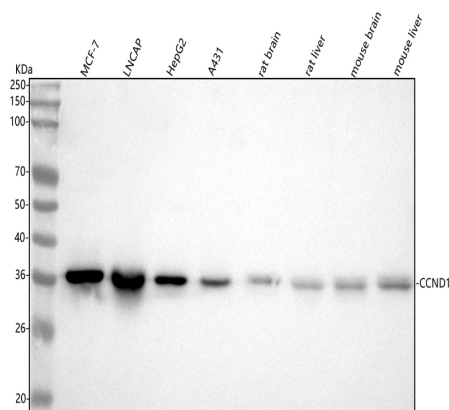
Cyclin D1, also known as CCND1, is a human gene. The protein encoded by this gene belongs to the highly conserved cyclin family, whose members are characterized by a dramatic periodicity in protein abundance throughout the cell cycle. Cyclin D1 encodes the regulatory subunit of a holoenzyme that phosphorylates and inactivates the retinoblastoma protein and promotes progression through the G1-S phase of the cell cycle. Amplification or overexpression of cyclin D1 plays pivotal roles in the development of a subset of human cancers including parathyroid adenoma, breast cancer, colon cancer, lymphoma, melanoma, and prostate cancer. The cyclin D1 gene is overexpressed in human breast cancers and is required for oncogene-induced tumorigenesis. Brisken et al. (2003) found that prolactin induced IGF2 mRNA and IGF2 induced cyclin D1 protein expression in mouse mammary epithelial

cultures. And they also concluded that IGF2 is a mediator of prolactin-induced alveologenesis and that prolactin, IGF2, and cyclin D1 are components of a developmental pathway in mammary gland.

## Reference

Anti-Cyclin D1/CCND1 Antibody (Clone#DAD-3)被引用在23文献中。

## Selected Validation Data



Western blot analysis of anti-Cyclin D1/CCND1 antibody (BM4272). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human MCF-7 whole cell lysates,  
Lane 2: human LNCAP whole cell lysates,  
Lane 3: human HepG2 whole cell lysates,  
Lane 4: human A431 whole cell lysates,  
Lane 5: rat brain tissue lysates,  
Lane 6: rat liver tissue lysates,  
Lane 7: mouse brain tissue lysates,  
Lane 8: mouse liver tissue lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-Cyclin D1/CCND1 antigen affinity purified monoclonal antibody (BM4272) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for Cyclin D1/CCND1 at approximately 34 kDa. The expected band size for Cyclin D1/CCND1 is at 34 kDa.