

## Basic Information

<b>Product Name</b>	Anti-Cyclin D1/CCND1 Antibody
<b>Gene Name</b>	CCND1
<b>Source</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG
<b>Species Reactivity</b>	human, rat
<b>Tested Application</b>	WB, FCM
<b>Contents</b>	500 ug/ml antibody with PBS, 0.02% NaN <sub>3</sub> , 1 mg/ml BSA and 50% glycerol.
<b>Immunogen</b>	A synthetic peptide corresponding to a sequence at the N-terminus of human Cyclin D1, different from the related mouse and rat sequences by two amino acids.
<b>Concentration</b>	500 ug/ml
<b>Purification</b>	Immunogen affinity purified.
<b>Observed MW</b>	34 kDa
<b>Dilution Ratios</b>	Western blot (WB): 1:500-2000 Flow Cytometry (Fixed):1:50-200

## Storage

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

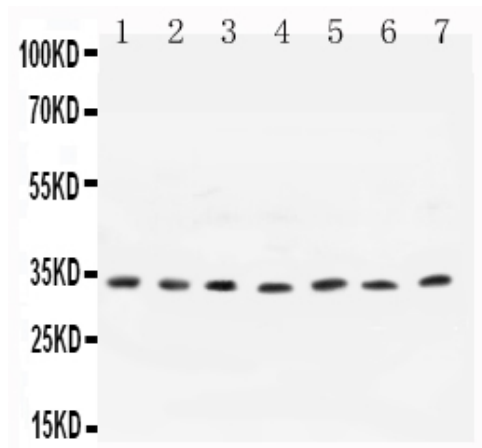
## Background Information

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. Briskin et al. (2003) found that prolactin (PRL; 176760) induced IGF2 (147470) 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 被引用在13文献中。

## Selected Validation Data



Western blot analysis of Cyclin D1/CCND1 using anti-Cyclin D1/CCND1 antibody (BA0770-2). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: Rat Testis tissue lysates,

Lane 2: Human Placenta tissue lysates,

Lane 3: Rat Brain tissue lysates,

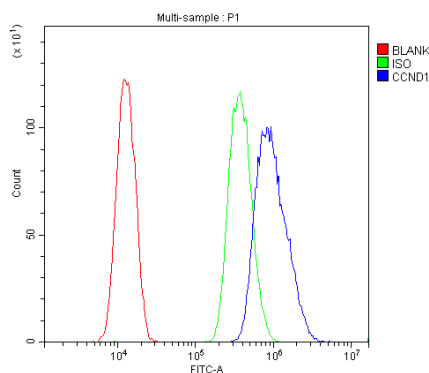
Lane 4: MCF-7 whole cell lysates,

Lane 5: COLO320 whole cell lysates,

Lane 6: SW620 whole cell lysates,

Lane 7: MM231 whole cell lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-Cyclin D1/CCND1 antigen affinity purified polyclonal antibody (BA0770-2) 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.



Flow Cytometry analysis of U-87MG cells using anti-Cyclin D1 antibody (BA0770-2).

Overlay histogram showing U-87MG cells stained with BA0770-2 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-Cyclin D1 Antibody (BA0770-2, 1:100) for 30 min at 20°C. DyLight488 conjugated goat anti-rabbit IgG (BA1127, 1:100) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1:100) used under the same conditions. Unlabelled sample (Red line) was also used as a control.