

Basic Information

Product Name	Anti-Cyclin D1/CCND1 Antibody	
Gene Name	CCND1	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	human, mouse, rat	
Tested Application	WB, IHC, ICC/IF	
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol.	
Immunogen	A synthetic peptide corresponding to a sequence in the middle region of human Cyclin D1 different from the related mouse sequence by two amino acids, and from the related rat sequence by one amino acid.	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	34 kDa	
Dilution Ratios	Western blot (WB):	1:500-2000
	Immunohistochemistry (IHC):	1:50-400
	Immunocytochemistry/Immunofluorescence (ICC/IF):	1:50-400
	(Boiling the paraffin sections in 10mM citrate buffer,pH6.0,or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

Storage

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

Background Information

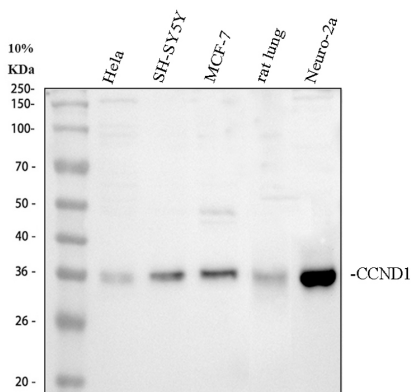
Cyclin D1, also known as CCND1, is a human gene. The protein encoded by this gene belongs to the highly conserved cyclin family, whose members are characterized by a dramatic periodicity in protein abundance throughout the cell cycle. Cyclin D1 encodes the regulatory subunit of a holoenzyme that phosphorylates 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 被引用在70文献中。

Selected Validation Data



Western blot analysis of Cyclin D1/CCND1 using anti-Cyclin D1/CCND1 antibody (PB0403). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human HeLa whole cell lysates,

Lane 2: human SH-SY5Y whole cell lysates,

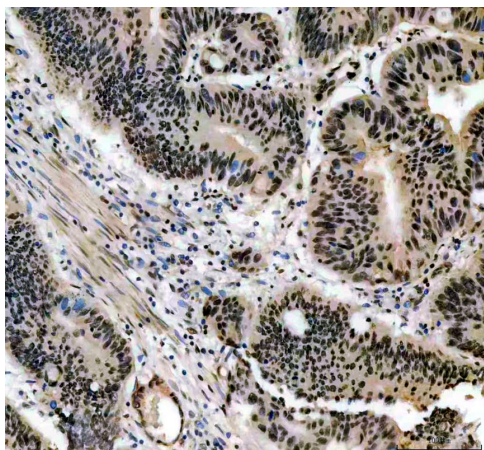
Lane 3: human MCF-7 whole cell lysates,

Lane 4: rat lung tissue lysates,

Lane 5: mouse Neuro-2a whole cell lysates.

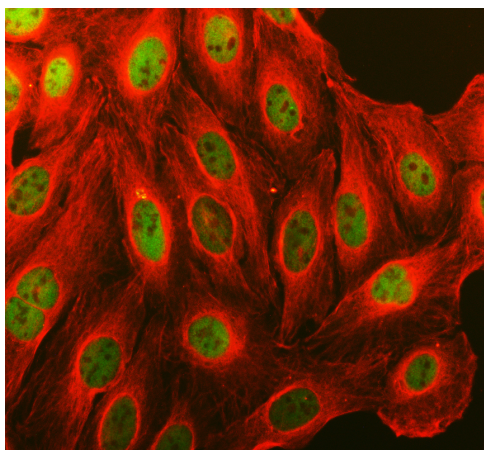
After electrophoresis, proteins were transferred to a membrane.

Then the membrane was incubated with rabbit anti-Cyclin D1/CCND1 antigen A03957-Aen affinity purified polyclonal antibody (PB0403) 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.



IHC analysis of Cyclin D1/CCND1 using anti-Cyclin D1/CCND1 antibody (PB0403).

Cyclin D1/CCND1 was detected in a paraffin-embedded section of human colon cancer tissue. The tissue section was incubated with rabbit anti-Cyclin D1/CCND1 Antibody (PB0403) at a dilution of 1:200 and developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB (Catalog # AR1027) as the chromogen.



ICC/IF analysis of Cyclin D1/CCND1 using anti-Cyclin D1/CCND1 antibody (PB0403) and anti-Beta Tubulin antibody (M01857-3).

Cyclin D1/CCND1 was detected in an immunocytochemical section of U2OS cells. The section was incubated with rabbit anti-Cyclin D1/CCND1 Antibody (PB0403) at a dilution of 1:100. Fluoro488-conjugated Anti-rabbit IgG Secondary Antibody (green) (Catalog # BA1127) and Cy3-conjugated Anti-mouse IgG Secondary Antibody (red) (Catalog # BA1031) were used as secondary antibody.