

## **Cyclin D1 Polyclonal Antibody**

Catalog No: YT1173

**Reactivity:** Human; Mouse; Rat; Pig

**Applications:** IF;WB;IHC;ELISA

Target: Cyclin D1

**Fields:** >>Endocrine resistance;>>FoxO signaling pathway;>>Cell cycle;>>p53

signaling pathway;>>PI3K-Akt signaling pathway;>>AMPK signaling

pathway;>>Cellular senescence;>>Wnt signaling pathway;>>Hedgehog signaling

pathway;>>Apelin signaling pathway;>>Hippo signaling pathway;>>Focal

adhesion;>>Tight junction;>>JAK-STAT signaling pathway;>>Prolactin signaling

pathway;>>Thyroid hormone signaling pathway;>>Oxytocin signaling

pathway;>>AGE-RAGE signaling pathway in diabetic complications;>>Cushing syndrome;>>Alcoholic liver disease;>>Hepatitis C;>>Measles;>>Human

cytomegalovirus infection;>>Human papillomavirus infection;>>Human T-cell

leukemia virus 1 infection;>>Kaposi sarcoma-associated herpesvirus infection;>>Epstein-Barr virus infection;>>Pathways in cancer;>>Viral

carcinogenesis;>>Proteoglycans in cancer;>>MicroRNAs in cancer;>>Chemical

carcinogenesis - receptor activation;>>Colorectal cancer;>>Pancreatic cancer;>>Endometrial cancer;>>Glioma;>>Prostate cancer;>>Thyroid

cancer;>>Melanoma;>>Bla

Gene Name: CCND1

Protein Name: G1/S-specific cyclin-D1

P25322

**Human Gene Id:** 595

**Human Swiss Prot** P24385

No:

Mouse Gene Id: 12443

**Mouse Swiss Prot** 

No:

Rat Gene ld: 58919

Rat Swiss Prot No: P39948

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**Immunogen:** The antiserum was produced against synthesized peptide derived from human

Cyclin D1. AA range:246-295

**Specificity:** Cyclin D1 Polyclonal Antibody detects endogenous levels of Cyclin D1 protein.

**Formulation :** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

**Dilution :** IF 1:50-200 WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:40000. Not yet

tested in other applications.

**Purification:** The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 33kD

**Cell Pathway:** Cell\_Cycle\_G1S;Cell\_Cycle\_G2M\_DNA;p53;WNT;WNT-T CELLFocal

adhesion;Jak\_STAT;Pathways in cancer;Colorectal cancer;Pancreatic

cancer; Endometrial cancer; Glioma; Prostate cancer; Thyroid cancer; Melanoma; Bla

**Background:** 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. Cyclins function as regulators of CDK kinases. Different cyclins exhibit distinct expression and degradation patterns which contribute to the temporal coordination of each mitotic event. This cyclin forms a complex with and functions as a regulatory subunit of CDK4 or CDK6, whose activity is required for cell cycle G1/S transition. This protein has been shown to interact with tumor suppressor protein Rb and the expression of this gene is regulated positively by Rb. Mutations, amplification and overexpression of this gene, which alters cell cycle progression, are observed frequently in a variety of tumors and may

contribute to tumorigenesis. [provided by RefSeq, Jul 2008],

**Function:** disease: A chromosomal aberration involving CCND1 may be a cause of B-

lymphocytic malignancy, particularly mantle-cell lymphoma (MCL). Translocation t(11;14)(q13;q32) with immunoglobulin gene regions. Activation of CCND1 may be oncogenic by directly altering progression through the cell cycle.,disease:A chromosomal aberration involving CCND1 may be a cause of multiple myeloma [MIM:254500]. Translocation t(11;14)(q13;q32) with the lgH locus.,disease:A chromosomal aberration involving CCND1 may be a cause of parathyroid

adenomas [MIM:168461]. Translocation t(11;11)(q13;p15) with the parathyroid hormone (PTH) enhancer.,function:Essential for the control of the cell cycle at the

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G1/S (start) transition.,online information:The Singapore human mutation and polymorphism database,PTM:Following DNA damage it is ubiquitinated by some SCF (SKP1-cullin-F-box) protein ligase complex containing FBXO31.

Subcellular Location:

Nucleus . Cytoplasm . Nucleus membrane . Cyclin D-CDK4 complexes accumulate at the nuclear membrane and are then translocated to the nucleus through interaction with KIP/CIP family members. .

**Expression :** Brain, Placenta, Tongue,

Tag: orthogonal

Sort:

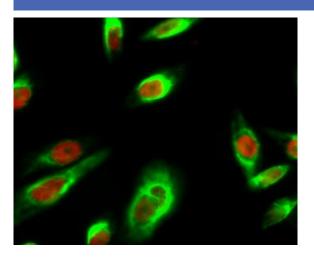
**No3:** ab16663

No4:

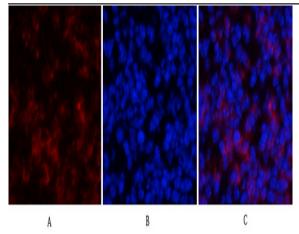
**Host:** Rabbit

Modifications: Unmodified

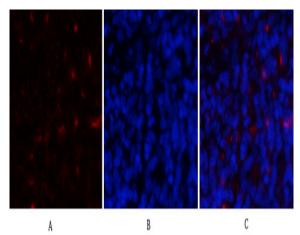
## **Products Images**



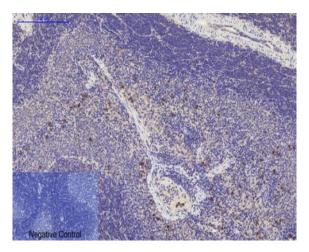
Immunofluorescence analysis of Hela cell. 1,Cyclin D1 Polyclonal Antibody(red) was diluted at 1:200(4° overnight). GAPDH Monoclonal Antibody(2B8)(green) was diluted at 1:200(4° overnight). 2, Goat Anti Rabbit Alexa Fluor 594 Catalog:RS3611 was diluted at 1:1000(room temperature, 50min). Goat Anti Mouse Alexa Fluor 488 Catalog:RS3208 was diluted at 1:1000(room temperature, 50min).



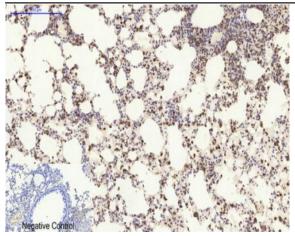
Immunofluorescence analysis of mouse-spleen tissue. 1,Cyclin D1 Polyclonal Antibody(red) was diluted at 1:200(4°C,overnight). 2, Cy3 labled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B



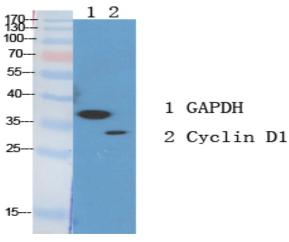
Immunofluorescence analysis of rat-spleen tissue. 1,Cyclin D1 Polyclonal Antibody(red) was diluted at 1:200(4°C,overnight). 2, Cy3 labled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B



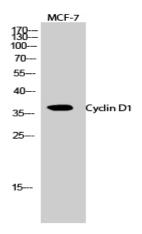
Immunohistochemical analysis of paraffin-embedded Rat-spleen tissue. 1,Cyclin D1 Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



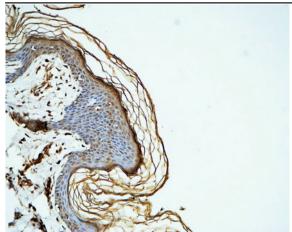
Immunohistochemical analysis of paraffin-embedded Mouse-lung tissue. 1,Cyclin D1 Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



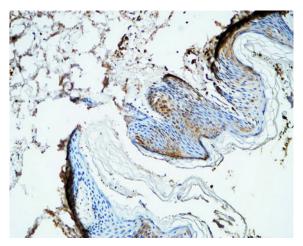
Western Blot analysis of various cells using Cyclin D1 Polyclonal Antibody diluted at 1:1000



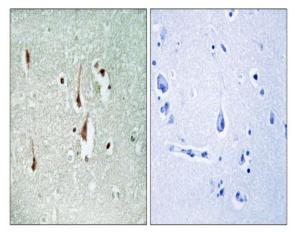
Western Blot analysis of MCF-7 cells using Cyclin D1 Polyclonal Antibody diluted at 1:1000



Immunohistochemical analysis of paraffin-embedded Human skin. 1, Antibody was diluted at 1:100(4° overnight). 2, Highpressure and temperature EDTA, pH8.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 30min).

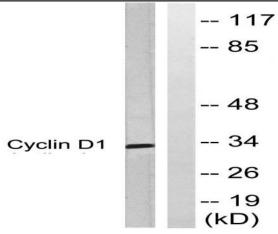


Immunohistochemical analysis of paraffin-embedded Human skin. 1, Antibody was diluted at 1:100(4° overnight). 2, Highpressure and temperature EDTA, pH8.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 30min).



Immunohistochemistry analysis of paraffin-embedded human brain tissue, using Cyclin D1 Antibody. The picture on the right is blocked with the synthesized peptide.





Western blot analysis of lysates from Jurkat cells, treated with EGF 200ng/ml 30', using Cyclin D1 Antibody. The lane on the right is blocked with the synthesized peptide.