

Summary

Production Name	Cyclin D1 Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	IF, WB, IHC, ELISA
Reactivity	Human, Mouse, Rat, Pig

Performance

Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

Immunogen

Gene Name	CCND1
Alternative Names	CCND1; BCL1; PRAD1; G1/S-specific cyclin-D1; B-cell lymphoma 1 protein; BCL-1; BCL-1 oncogene; PRAD1 oncogene
Gene ID	595.0
SwissProt ID	P24385. The antiserum was produced against synthesized peptide derived from human Cyclin D1. AA range: 246-295

Application

Dilution Ratio	IF 1:50-200 WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:40000. Not yet tested in other applications.
Molecular Weight	33kD

Background

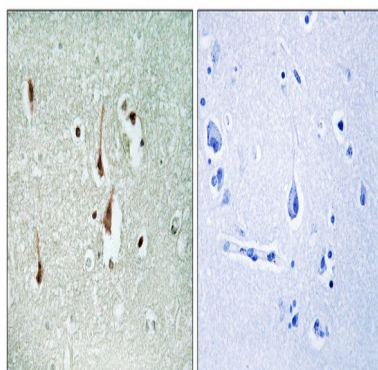
The protein encoded by this gene belongs to the highly conserved cyclin family, whose members are characterized by a dramatic periodicity in protein abundance throughout the cell cycle. Cyclins function as regulators of CDK kinases. Different cyclins exhibit distinct expression and degradation patterns 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],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 IgH 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 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. Ubiquitination leads to its degradation and G1 arrest.,PTM:Phosphorylation at Thr-286 by MAP kinases is required for ubiquitination and degradation following DNA damage. It probably plays an essential role for recognition by the FBXO31 component of SCF (SKP1-cullin-F-box) protein ligase complex.,similarity:Belongs to the cyclin family.,similarity:Belongs to the cyclin family. Cyclin D subfamily.,subunit:Interacts with the CDK4 and CDK6 protein kinases to form a serine/threonine kinase holoenzyme complex. The cyclin subunit imparts substrate specificity to the complex.,

Research Area

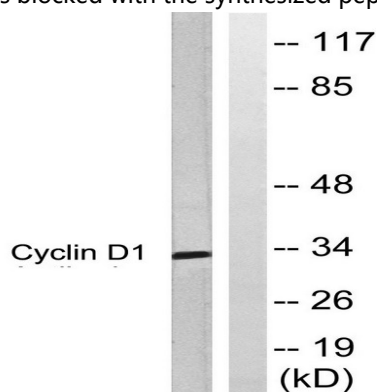
Cell_Cycle_G1S;Cell_Cycle_G2M_DNA;p53;WNT;WNT-T CELLFocal adhesion;Jak_STAT;Pathways in cancer;Colorectal cancer;Pancreatic cancer;Endometrial cancer;Glioma;Prostate cancer;Thyroid cancer;Melanoma;Bladder cancer;Chronic myeloid leukemia;Acute myeloid leukemia;Small cell lung cancer;Non-small cell lung cancer;Viral myocarditis;

Image Data

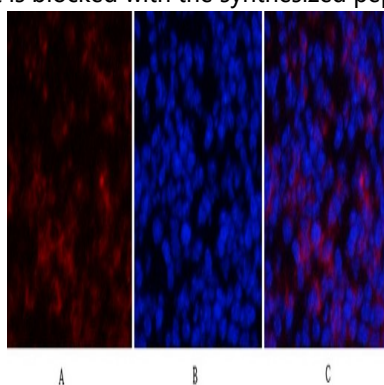
Product Name: Cyclin D1 Rabbit Polyclonal Antibody
Catalog #: APRab09590



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

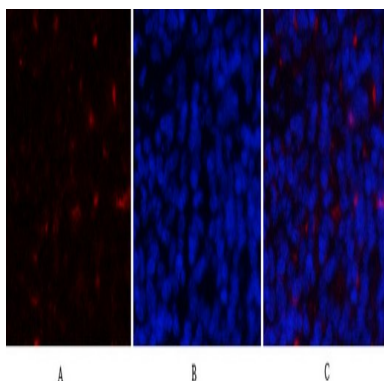


Western blot analysis of lysates from Jurkat cells, treated with EGF 200ng/ml 30', using Cyclin D1 Antibody. The lane on the right is blocked with the synthesized peptide.

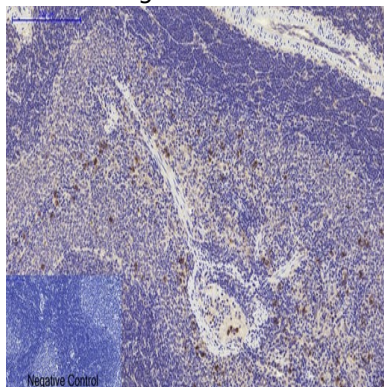


Immunofluorescence analysis of mouse-spleen tissue. 1, Cyclin D1 Polyclonal Antibody (red) was diluted at 1:200 (4°C, overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300 (room temperature, 50min). 3, Picture B: DAPI (blue) 10min. Picture A: Target. Picture B: DAPI. Picture C: merge of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

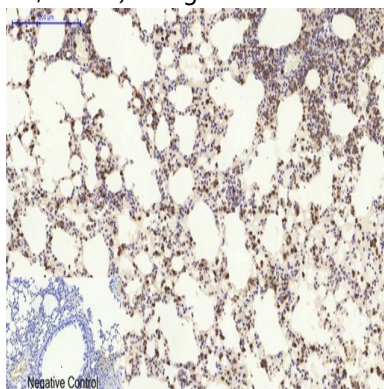
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Immunofluorescence analysis of rat-spleen tissue. 1,Cyclin D1 Polyclonal Antibody (red) was diluted at 1:200 (4°C,overnight) . 2, Cy3 labeled Secondary antibody was diluted at 1:300 (room temperature, 50min) .3, Picture B: DAPI (blue) 10min. Picture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

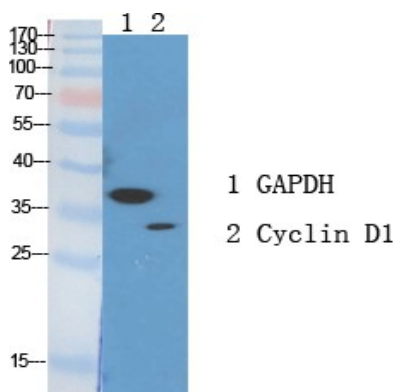


Immunohistochemical analysis of paraffin-embedded Rat-spleen tissue. 1,Cyclin D1 Polyclonal Antibody was diluted at 1:200 (4°C,overnight) . 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98°C,20min) . 3,Secondary antibody was diluted at 1:200 (room temperature, 30min) . Negative control was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

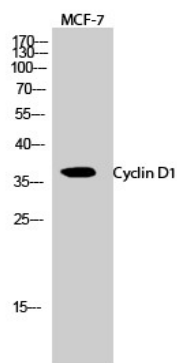


Immunohistochemical analysis of paraffin-embedded Mouse-lung tissue. 1,Cyclin D1 Polyclonal Antibody was diluted at 1:200 (4°C,overnight) . 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98°C,20min) . 3,Secondary antibody was diluted at 1:200 (room temperature, 30min) . Negative control was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

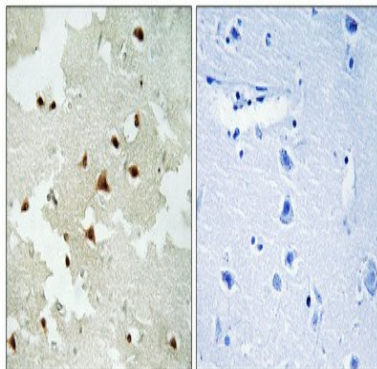
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Western Blot analysis of various cells using Cyclin D1 Polyclonal Antibody diluted at 1: 1000



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



Immunohistochemical analysis of paraffin-embedded Human brain. Antibody was diluted at 1:100 (4°, overnight) . High-pressure and temperature Tris-EDTA, pH8.0 was used for antigen retrieval. Negative control (right) obtained from antibody was pre-absorbed by immunogen peptide.

Note

For research use only.