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Anti-Cyclin D1 antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP50933

Specification

Anti-Cyclin D1 antibody - Product Information

Application	**WB, IHC-P, FC**
Primary Accession	P24385
Reactivity	**Human, Mouse, Rat, Dog**
Host	**Rabbit**
Clonality	**polyclonal**
Calculated MW	**H=34; KDa**

Anti-Cyclin D1 antibody - Additional Information

Gene ID 595

Other Names
G1/S-specific cyclin-D1, B-cell lymphoma 1 protein, BCL-1, BCL-1 oncogene, PRAD1 oncogene, CCND1, BCL1, PRAD1

Dilution
WB~~1:100~1:500<br \>IHC-P~~1:100~1:500<br \>FC~~1:20~1:100

Format
0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

Storage
Store at -20 ℃ for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 ℃.

Anti-Cyclin D1 antibody - Protein Information

Name CCND1 {ECO:0000303|PubMed:8204893, ECO:0000312|HGNC:HGNC:1582}

Function
Regulatory component of the cyclin D1-CDK4 (DC) complex that phosphorylates and inhibits members of the retinoblastoma (RB) protein family including RB1 and regulates the cell-cycle during G(1)/S transition (PubMed:1833066, PubMed:1827756, PubMed:8114739, PubMed:8302605, PubMed:19412162, PubMed:33854235). Phosphorylation of RB1 allows dissociation of the transcription factor E2F from the RB/E2F complex and the subsequent transcription of E2F target genes which

are responsible for the progression through the G(1) phase (PubMed:1833066, PubMed:1827756, PubMed:8114739, PubMed:8302605, PubMed:19412162). Hypophosphorylates RB1 in early G(1) phase (PubMed:1833066, PubMed:1827756, PubMed:8114739, PubMed:8302605, PubMed:19412162). Cyclin D-CDK4 complexes are major integrators of various mitogenenic and antimitogenic signals (PubMed:1833066, PubMed:1827756, PubMed:8302605, PubMed:19412162). Also a substrate for SMAD3, phosphorylating SMAD3 in a cell-cycle-dependent manner and repressing its transcriptional activity (PubMed:15241418). Component of the ternary complex, cyclin D1/CDK4/CDKN1B, required for nuclear translocation and activity of the cyclin D-CDK4 complex (PubMed:9106657). Exhibits transcriptional corepressor activity with INSM1 on the NEUROD1 and INS promoters in a cell cycle-independent manner (PubMed:16569215, PubMed:18417529).

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

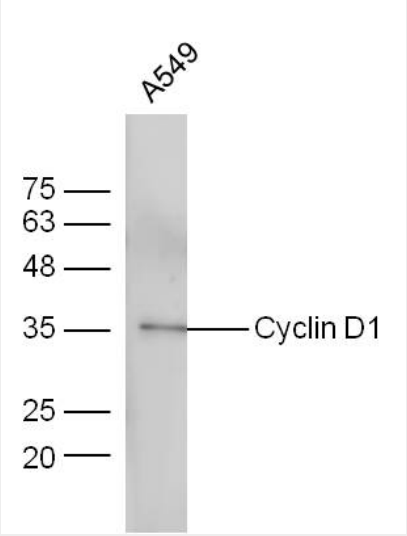
Anti-Cyclin D1 antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

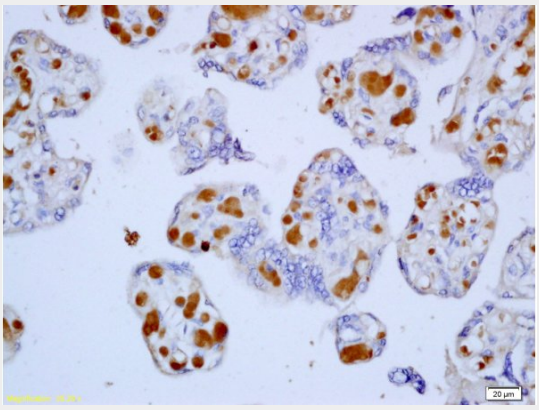
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-Cyclin D1 antibody - Images

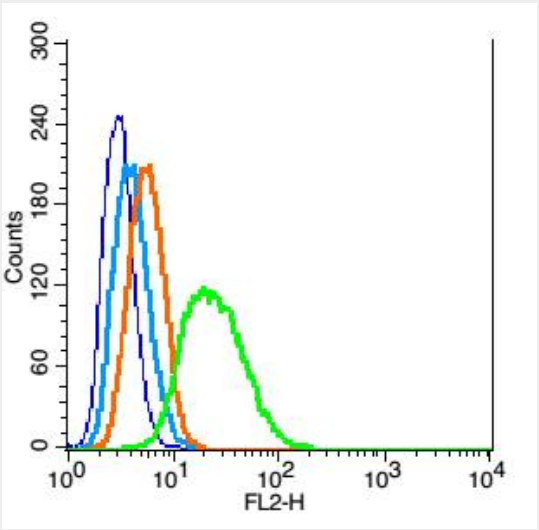
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A549 cells probed with Anti-Cyclin D1 Polyclonal Antibody AP50933 at 1:300 overnight in 4˚C. Followed by conjugation to the secondary antibody at 1:5000 90min in 37˚C.



Formalin-fixed and paraffin embedded human placenta tissue labeled with Anti-Cyclin D1 Polyclonal Antibody, Unconjugated (AP50933) at 1:200, followed by conjugation to the secondary antibody and DAB staining



RSC96 cells probed with Cyclin D1 Polyclonal Antibody, Unconjugated AP50933 at 1:100 for 30 minutes followed by incubation with a conjugated secondary (PE Conjugated) (green) for 30 minutes compared to control cells (blue), secondary only (light blue) and isotype control (orange).

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Anti-Cyclin D1 antibody - Background

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Anti-Cyclin D1 antibody - References

Motokura T.,et al.Nature 350:512-515(1991).
Lew D.J.,et al.Cell 66:1197-1206(1991).
Xiong Y.,et al.Cell 65:691-699(1991).
Withers D.A.,et al.Mol. Cell. Biol. 11:4846-4853(1991).
Rimokh R.,et al.Blood 83:3689-3696(1994).

Anti-Cyclin D1 antibody - Citations

- Elucidating the role of the FoxO3a transcription factor in the IGF-1-induced migration and invasion of uveal melanoma cancer cells.