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CCND1-Y226 Antibody

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP5314d

Specification

CCND1-Y226 Antibody - Product Information

Application	IF, WB,E
Primary Accession	P24385
Other Accession	NP_444284
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit Ig
Calculated MW	33729
Antigen Region	203-238

CCND1-Y226 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

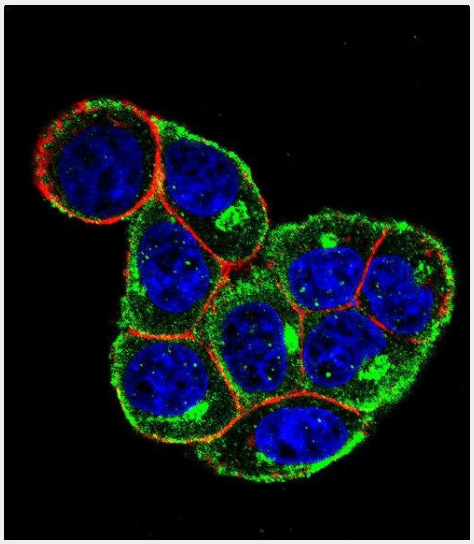
Target/Specificity
This CCND1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 203-238 amino acids from human CCND1.

Dilution
IF~~1:10~50
WB~~1:1000

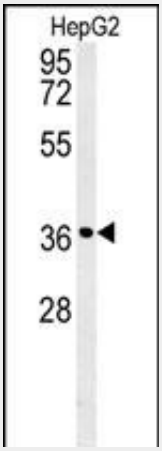
Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
CCND1-Y226 Antibody is for research use only and not for use in diagnostic or



Confocal immunofluorescent analysis of CCND1-Y226 Antibody(Cat#AP5314d) with Hela cell followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG (green). Actin filaments have been labeled with Alexa Fluor 555 phalloidin (red).DAPI was used to stain the cell nuclear (blue).



CCND1-Y226 antibody (Cat. #AP5314d) western blot analysis in HepG2 cell line lysates (35ug/lane).This demonstrates the CCND1 antibody detected the CCND1 protein (arrow).

therapeutic procedures.

CCND1-Y226 Antibody - Protein Information

Name CCND1

Synonyms BCL1, PRAD1

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

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

CCND1-Y226 Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation

CCND1-Y226 Antibody - Background

CCND1 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.

CCND1-Y226 Antibody - References

Edel, M.J., et al. Genes Dev. 24(6):561-573(2010)
Zhong, Z., et al. Cancer Res. 70(5):2105-2114(2010)
Kanaan, Z., et al. Int. J. Biol. Markers 25(1):27-31(2010)

- Flow Cytomety
- Cell Culture