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Cyclin D1 Antibody

Rabbit mAb
Catalog # AP90436

Product Information

Application	WB, IHC, IF, ICC, IP, IHF
Primary Accession	P24385
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Other Names	CCND1;BCL1; D11S287E; PRAD1; U21B31; Cyclin D1;
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	33729

Additional Information

Dilution	WB 1:1000~1:5000 IHC 1:50~1:200 ICC/IF 1:50~1:100 IP 1:50
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human Cyclin D1
Description	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 G1 phase. Hypophosphorylates RB1 in early G1 phase. Cyclin D-CDK4 complexes are major integrators of various mitogenenic and antimitogenic signals.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

Protein Information

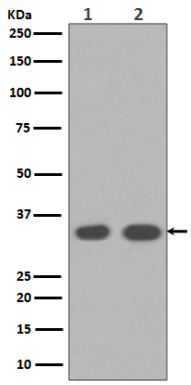
Name	CCND1 {ECO:0000303|PubMed:8204893, ECO:0000312|HGNC:HGNC:1582}
Function	Regulatory component of the cyclin D1-CDK4 (DC) complex that phosphorylates and inhibits members of the retinoblastoma (RB) protein family including RB1 and regulates the cell-cycle during G(1)/S transition (PubMed:1827756, PubMed:1833066, PubMed:19412162, PubMed:33854235, PubMed:8114739, PubMed:8302605). 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:1827756, PubMed:1833066, PubMed:19412162, PubMed:8114739, PubMed:8302605). Hypophosphorylates RB1 in early G(1) phase (PubMed:1827756, PubMed:1833066, PubMed:19412162, PubMed:8114739, PubMed:8302605). Cyclin D-CDK4 complexes are major integrators of various mitogenenic and antimitogenic signals (PubMed:1827756, PubMed:1833066, PubMed:19412162, PubMed:8302605). 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

Images



Western blot analysis of Cyclin D1 expression in (1)MCF-7 cell lysates;(2) LnCaP cell lysates.

Image not found : 202311/AP90436-IHC.jpg

Immunohistochemical analysis of paraffin-embedded human bladder, using Cyclin D1 Antibody.

Image not found : 202311/AP90436-IF.jpg

Immunofluorescent analysis of MCF-7 cells, using Cyclin D1 Antibody .

Image not found : 202311/AP90436-wb6.jpg

miR-139-5p reverses stemness maintenance and metastasis of colon cancer stem-like cells by targeting E2-2. -JOURNAL OF CELLULAR PHYSIOLOGY

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