Anti-Cyclin D1 (RABBIT) Antibody - 100-401-153

Code: 100-401-153 **Size:** 100 µL

Product Description: Anti-Cyclin D1 (RABBIT) Antibody - 100-401-153

Concentration: 85 mg/mL by Refractometry

PhysicalState: Liquid (sterile filtered)

Label	Unconjugated
Host	Rabbit
Gene Name	CCND1
Species Reactivity	human
Buffer	None
Stabilizer	None
Preservative	0.01% (w/v) Sodium Azide
Storage Condition	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Synonyms	G1/S-specific cyclin-D1 PRAD1 oncogene BCL-1 oncogene
Application Note	This antibody has been tested for use in ELISA and by western blot. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 34 kDa in size corresponding to Cyclin D1 by western blotting in the appropriate cell lysate or extract. MCF7 may be used as a positive control. Anti-Cyclin D1is suitable for the detection by immunoblot of human, rat and mouse Cyclin D1.
Background	Cyclin D1 (also known as G1/S-specific cyclin D1, PRAD1 oncogene, BCL-1 oncogene, and PRAD1: parathyroid adenomatosis 1) is encoded by a gene that belongs to the highly conserved cyclin family. Cyclins are characterized by a dramatic periodicity in protein abundance throughout the cell cycle and function as regulators of CDK kinases. Different cyclins exhibit distinct expression and degradation patterns, which contribute to the temporal coordination of each mitotic event. Cyclin D1 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.
Purity And Specificity	This product was prepared from monospecific antiserum by delipidation and defibrination. Antiserum will specifically react with a 40-45 kDa Cyclin D1 protein from human, rat and mouse tissue. No reaction was observed against other related cyclins. Cross reactivity with Cyclin D1 from other species may also occur.
Assay Dilutions	User Optimized
ELISA	1:2,000 - 1:10,000
WESTERN BLOT	1:500 - 1:1,000
OTHER ASSAYS	User Optimized
Immunogen	Anti-Cyclin D1 was produced by repeated immunizations of full length fusion protein corresponding to the human gene sequence.
General Reference	Xiong, Y., Connolly, T., Futcher, B., and Beach, D. (1991) Human D-type cyclin. Cell 65: 691-699. Motokura, T., Bloom, T., Kim, H.G., Juppner, H., Ruderman, J.V., Kronenberg, H.M. and Arnold, A. (1991) A novel cyclin encoded by a bcl1-linked candidate oncogene. Nature 350: 512-515. Lutzen,A., Bisgaard,H.C. and Rasmussen,L.J. (2004) Cyclin D1 expression and cell cycle response in DNA mismatch repair-deficient cells upon methylation and UV-C damage. Exp. Cell Res. 292 (1): 123-134. Pines J. (1993) Cyclins and cyclin-dependent kinases: take your partners. Trends Biochem Sci.18(6):195-7. Xiong, Y., Connolly, T., Futcher, B., and Beach, D. (1991) Human D-type cyclin. Cell 65: 691-699.
Related Products	

200-301-268 Anti-AKT pS473 (MOUSE) Monoclonal Antibody - 200-301-268

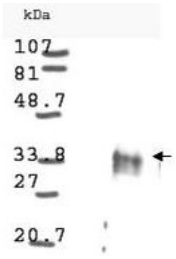
610-4302	Anti-MOUSE IgG (H&L) (RABBIT) Antibody Peroxidase Conjugated - 610-4302
611-1302	Anti-RABBIT IgG (H&L) (GOAT) Antibody Peroxidase Conjugated - 611-1302
B304	NORMAL GOAT SERUM (NGS) - B304

Related Links

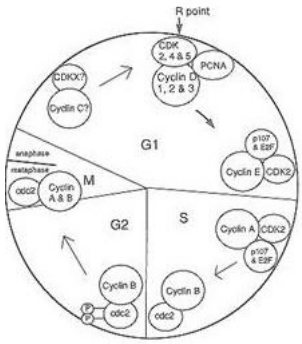
NCBI	http://www.ncbi.nlm.nih.gov/protein/16950655
UniProtKB	http://www.uniprot.org/uniprot/P24385
NCBI - 16950655	http://www.ncbi.nlm.nih.gov/protein/16950655
UniProt - P24385	http://www.uniprot.org/uniprot/P24385
Gene ID - 595	http://www.ncbi.nlm.nih.gov/gene/595

Images

1	Western blot analysis is shown using Rockland's Anti-Cyclin D



2	The R point is the restriction point. The diagram shows the stages of the cell cycle and the binding of the specified cyclins with the corresponding CDKs at each stage. cdc2 is kinase, p107 and E2F are proteins involved in transcription. See Pines, J. (1993).



Disclaimer

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