Datasheet for ABIN6138079

anti-Cyclin D1 antibody (AA 96-295)

5 Images | 1 Publication

Go to Product page

Overview

Quantity:	100 µL
Target:	Cyclin D1 (CCND1)
Binding Specificity:	AA 96-295
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This Cyclin D1 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC)

Product Details

Immunogen:	Recombinant fusion protein containing a sequence corresponding to amino acids 96-295 of human Cyclin D1 (NP_444284.1).
Sequence:	KSRLQLLGAT CMFVASKMKE TIPLTAEKLC IYTDNSIRPE ELLQMELLLV NKLKWNLAAM TPHDFIEHFL SKMPEAEENK QIIRKHAQTF VALCATDVKF ISNPPSMVAA GSVVAAVQGL NLRSPNNFLS YYRLTRFLSR VIKCDPDCLR ACQEQIEALL ESSLRQAQQN MDPKAAEEEE EEEEEVDLAC TPTDVRDVDI
Isotype:	IgG
Cross-Reactivity:	Human, Rat
Characteristics:	Polyclonal Antibodies
Purification:	Affinity purification

Target Details

Target:	Cyclin D1 (CCND1)
Alternative Name:	CCND1 (CCND1 Products)
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.,BCL1,D11S287E,PRAD1,U21B31,CCND1,Cyclin D1,cyclin D1,Epigenetics & Nuclear Signaling,Cancer,Signal Transduction,PI3K-Akt Signaling Pathway,Cell Biology & Developmental Biology,Cell Cycle,Cyclins,G1/S Checkpoint,Hedgehog Signaling Pathway,CCND1
Molecular Weight:	33 kDa
Gene ID:	595
UniProt:	P24385
Pathways:	PI3K-Akt Signaling, Cell Division Cycle, Mitotic G1-G1/S Phases, ER-Nucleus Signaling

Application Details

Application Notes:	WB,1:500 - 1:1000,IHC,1:50 - 1:100
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	PBS with 0.02 % sodium azide,50 % glycerol, pH 7.3.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C

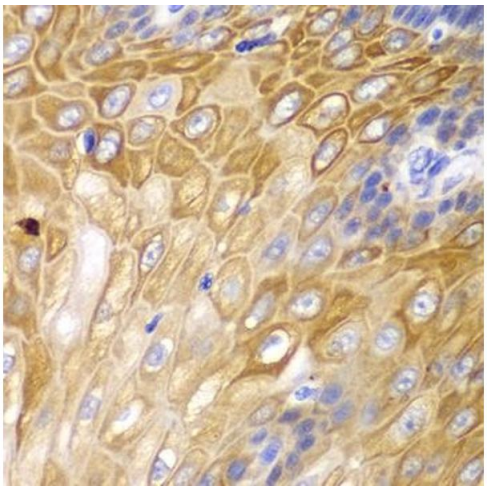
Handling

Storage Comment:	Store at -20°C. Avoid freeze / thaw cycles.

Publications

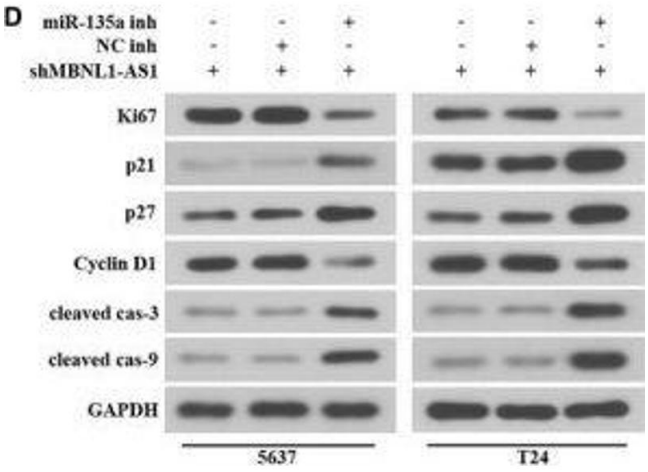
Product cited in:	Qin, Zheng, Zhou, Ou, Huang, Yan, Qin, Yang, Su, Bai, Guo, Lin: "Tsc1 deficiency impairs mammary development in mice by suppression of AKT, nuclear ERα, and cell-cycle-driving proteins." in: **Scientific reports**, Vol. 6, pp. 19587, (2017) (PubMed).

Images



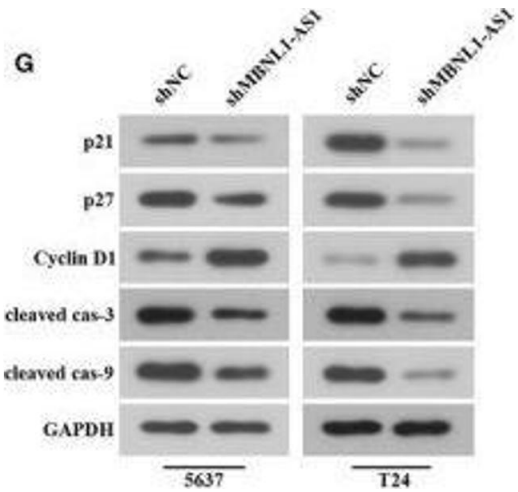
Immunohistochemistry

Image 1. Immunohistochemistry of paraffin-embedded human esophagus using Cyclin D1 antibody (ABIN6127677, ABIN6138079, ABIN6138081 and ABIN6213800) at dilution of 1:100 (40x lens).Perform microwave antigen retrieval with 10 mM PBS buffer pH 7.2 before commencing with IHC staining protocol.



Western Blotting

Image 2. MBNL1-AS1 regulated the proliferation and apoptosis of BC cells via miR-135a/PHLPP2/FOXO1 axis. A, Cell viability of 5673 and T24 cells was assessed by MTT. B, The proliferative cells were detected using Brdu staining. C, Flow cytometry analysis was carried out to examine the apoptotic cells. D, Western blot analysis of cell proliferative regulators (Ki67, p21, p27, and cyclin D1) and apoptotic regulators (cleaved caspase-3 and cleaved caspase-9) in 5673 and T24 cells. E, Western blot analysis of PHLPP2/FOXO1 signals (PHLPP2, FOXO1, p-AKT, and AKT) in 5673 and T24 cells. *P < .05, **P < .01, ***P < .001. BC, bladder cancer, MBNL1-AS1, muscleblind-like 1 antisense RNA 1 - figure provided by CiteAb. Source: PMID31769229



Western Blotting

Image 3. Inhibition of MBNL1-AS1 promoted the tumorigenesis of BC cells through the regulation of miR-135a/PHLPP2/FOXO1 in vivo. The nude mice were injected with 5673 and T24 cells stably transfected with shMBNL1-AS1, respectively. After 19 days, mice were sacrificed. A, The tumor xenografts were collected. B, Tumor size was measured every 3 days. C, The isolated tumor was weighed at day 19. D and E, qRT-PCR analysis of relative expression of MBNL1-AS1 and miR-135a. F, The immunopositive materials of Ki67 were detected using immunohistochemistry staining. G, The protein levels of cell proliferative regulators (p21, p27, and cyclin D1) and apoptotic regulators (cleaved caspase-3 and cleaved caspase-9) were tested by western blot. H, The protein levels of PHLPP2, FOXO1, p-AKT, and AKT were detected using western blot. **P < .01, ***P < .001. BC, bladder cancer, MBNL1-AS1, muscleblind-like 1 antisense RNA 1, qRT-PCR, quantitative real-time PCR - figure provided by CiteAb. Source: PMID31769229

Please check the product details page for more images. Overall 5 images are available for ABIN6138079.