

Datasheet for ABIN5518654

anti-Cyclin D1 antibody (N-Term)

1 Image

40 Publications



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Overview

Quantity:	100 µg
Target:	Cyclin D1 (CCND1)
Binding Specificity:	AA 19-37, N-Term
Reactivity:	Human, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This Cyclin D1 antibody is un-conjugated
Application:	Western Blotting (WB), Flow Cytometry (FACS)

Product Details

Purpose:	Anti-Cyclin D1/CCND1 Antibody Picoband®
Immunogen:	A synthetic peptide corresponding to a sequence at the N-terminus of human Cyclin D1, different from the related mouse and rat sequences by two amino acids.
Sequence:	DANLLNDRV L RAMLKAEET
Isotype:	IgG
Cross-Reactivity (Details):	No cross-reactivity with other proteins
Characteristics:	<p>Anti-Cyclin D1/CCND1 Antibody (ABIN5518654). Tested in Flow Cytometry, WB applications.</p> <p>This antibody reacts with Human, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.</p>

Product Details

Purification: Immunogen affinity purified.

Target Details

Target: Cyclin D1 (CCND1)

Alternative Name: CCND1 ([CCND1 Products](#))

Background: Synonyms: G1/S-specific cyclin-D1,B-cell lymphoma 1 protein,BCL-1,BCL-1 oncogene,PRAD1 oncogene,CCND1,BCL1, PRAD1,
Background: Cyclin D1, also known as CCND1, is a human gene. 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. Cyclin D1 encodes the regulatory subunit of a holoenzyme that phosphorylates and inactivates the retinoblastoma protein and promotes progression through the G1-S phase of the cell cycle. Amplification or overexpression of cyclin D1 plays pivotal roles in the development of a subset of human cancers including parathyroid adenoma, breast cancer, colon cancer, lymphoma, melanoma, and prostate cancer. The cyclin D1 gene is overexpressed in human breast cancers and is required for oncogene-induced tumorigenesis. Briskin et al. (2003) found that prolactin (PRL, 176760) induced IGF2 (147470) mRNA and IGF2 induced cyclin D1 protein expression in mouse mammary epithelial cultures. And they also concluded that IGF2 is a mediator of prolactin-induced alveologenesis and that prolactin, IGF2, and cyclin D1 are components of a developmental pathway in mammary gland.
Sequence Similarities: Belongs to the cyclin family. Cyclin D subfamily.

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: Western blot, 0.1-0.5 µg/mL, Human, Rat
Flow Cytometry (Fixed), 1-3 µg/1x10⁶ cells, Human
1. Fu, M., Wang, C., Li, Z., Sakamaki, T., Pestell, R. G. : Minireview: Cyclin D1: normal and abnormal functions. Endocrinology 145: 5439-5447, 2004. 2. Wang, C., Pattabiraman, N., Zhou, J. N., Fu, M., Sakamaki, T., Albanese, C., Li, Z., Wu, K., Hult, J., Neumeister, P., Novikoff, P. M., Brownlee, M., Scherer, P. E., Jones, J. G., Whitney, K. D., Donehower, L. A., Harris, E. L., Rohan, T.,

Application Details

Johns, D. C., Pestell, R. G. : Cyclin D1 repression of peroxisome proliferator-activated receptor gamma expression and transactivation. *Molec. Cell. Biol.* 23: 6159-6173, 2003. 3. Briskin, C., Ayyannan, A., Nguyen, C., Heineman, A., Reinhardt, F., Tan, J., Dey, S. K., Dotto, G. P., Weinberg, R. A. : IGF-2 is a mediator of prolactin-induced morphogenesis in the breast. *Dev. Cell* 3: 877-887, 2002. Note: Erratum: *Dev. Cell* 4: 283 only, 2003.

Comment: Antibody can be supported by chemiluminescence kit ABIN921124 in WB.

Restrictions: For Research Use only

Handling

Format: Lyophilized

Reconstitution: Add 0.2 mL of distilled water will yield a concentration of 500 µg/mL.

Concentration: 500 µg/mL

Buffer: Each vial contains 5 mg BSA, 0.9 mg NaCl, 0.2 mg Na₂HPO₄, 0.05 mg Thimerosal, 0.05 mg Sodium azide.

Preservative: Sodium azide, Thimerosal (Merthiolate)

Precaution of Use: This product contains Thimerosal (Merthiolate) and Sodium azide: POISONOUS AND HAZARDOUS SUBSTANCES which should be handled by trained staff only.

Storage: 4 °C, -20 °C

Storage Comment: Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.

Publications

Product cited in: Yang, Gao, Ma, Teng, Liu, Wei, Lu, Cheng, Hou, Zou: "Fucoidan inhibits lymphangiogenesis by downregulating the expression of VEGFR3 and PROX1 in human lymphatic endothelial cells." in: **Oncotarget**, Vol. 7, Issue 25, pp. 38025-38035, (2018) ([PubMed](#)).

Feng, Yan, Zhou, Liang, Liang, Zhao, Dong, Ling: "Piwi2 is reactivated by HPV oncoproteins and initiates cell reprogramming via epigenetic regulation during cervical cancer tumorigenesis." in: **Oncotarget**, Vol. 7, Issue 40, pp. 64575-64588, (2018) ([PubMed](#)).

Liao, Xiao, Chen, Zhang, Chen, Long, Gao, He, Ge, Yi, Wu, Li, Zhou: "The receptor for activated

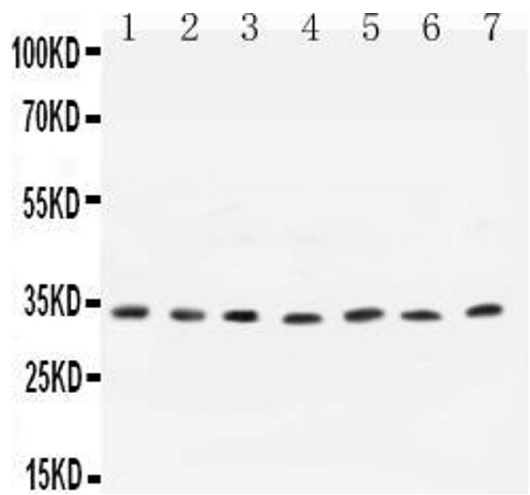
protein kinase C promotes cell growth, invasion and migration in cervical cancer." in: **International journal of oncology**, Vol. 51, Issue 5, pp. 1497-1507, (2018) ([PubMed](#)).

Cheng, Wang, Wang, Wang, Du, Lou: "Silencing Ras-Related C3 Botulinum Toxin Substrate 1 Inhibits Growth and Migration of Hypopharyngeal Squamous Cell Carcinoma via the P38 Mitogen-Activated Protein Kinase Signaling Pathway." in: **Medical science monitor : international medical journal of experimental and clinical research**, Vol. 24, pp. 768-781, (2018) ([PubMed](#)).

Li, Zheng, Ji, Liu, Lv, Yang, Hu, Chen, Zhang, Cao: "Effects of low-intensity ultrasound combined with low-dose carboplatin in an orthotopic hamster model of tongue cancer: A preclinical study." in: **Oncology reports**, Vol. 39, Issue 4, pp. 1609-1618, (2018) ([PubMed](#)).

There are more publications referencing this product on: [Product page](#)

Images



Western Blotting

Image 1. Anti- Cyclin D1 antibody, All Western blottingAll lanes: Anti-CCND1 at 0.5ug/ml Lane 1: Rat Testis Tissue Lysate at 40ug Lane 2: Human Placenta Tissue Lysate at 40ug Lane 3: Rat Brain Tissue Lysate at 40ug Lane 4: MCF-7 Whole Cell Lysate at 40ug Lane 5: COLO320 Whole Cell Lysate at 40ug Lane 6: SW620 Whole Cell Lysate at 40ug Lane 7: MM231 Whole Cell Lysate at 40ugPredicted bind size: 33KDObserved bind size: 33KD