

cyclin D1 Antibody (internal region)
Peptide-affinity purified goat antibody
Catalog # AF4062a

Specification

cyclin D1 Antibody (internal region) - Product Information

Application	WB
Primary Accession	P24385
Other Accession	NP_444284.1 , 595
Reactivity	Human
Host	Goat
Clonality	Polyclonal
Concentration	0.5 mg/ml
Isotype	IgG
Calculated MW	33729

cyclin D1 Antibody (internal region) - 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

Format

0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

cyclin D1 Antibody (internal region) is for research use only and not for use in diagnostic or therapeutic procedures.

cyclin D1 Antibody (internal region) - 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](http://www.uniprot.org/citations/1827756), PubMed: [1833066](http://www.uniprot.org/citations/1833066), PubMed: [19412162](http://www.uniprot.org/citations/19412162), PubMed: [33854235](http://www.uniprot.org/citations/33854235), PubMed: [8114739](http://www.uniprot.org/citations/8114739))

target="_blank">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 mitogenic 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

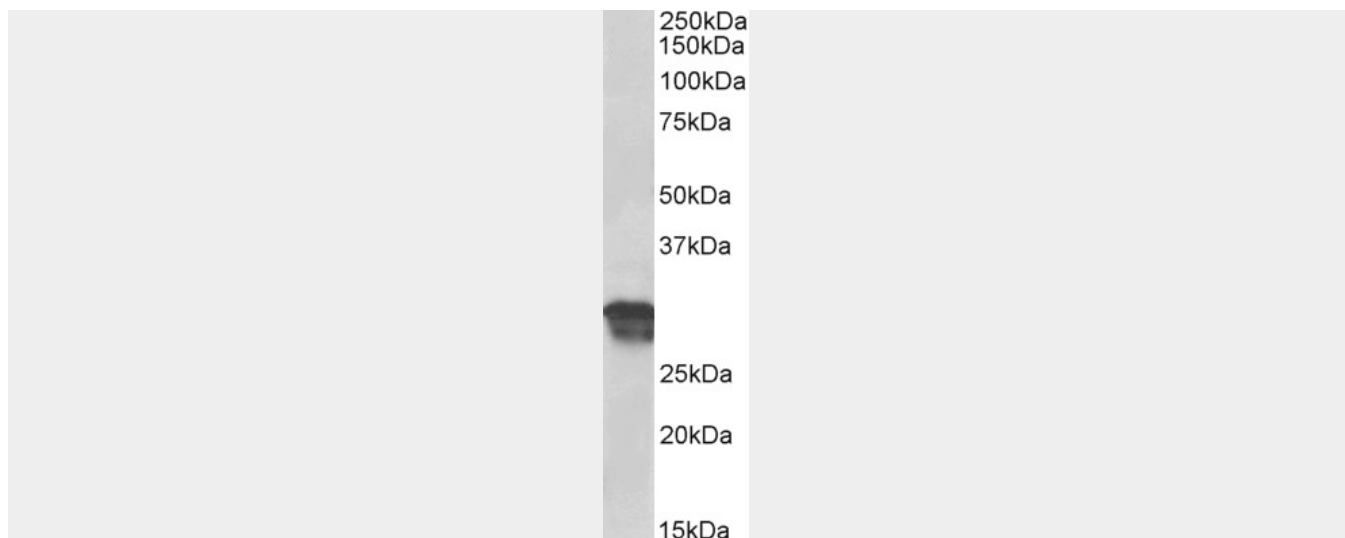
cyclin D1 Antibody (internal region) - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

cyclin D1 Antibody (internal region) - Images





AF4062a (0.5 $\mu\text{g/ml}$) staining of Human Placenta lysate (35 μg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

cyclin D1 Antibody (internal region) - References

A cyclin-D1 interaction with BAX underlies its oncogenic role and potential as a therapeutic target in mantle cell lymphoma. Beltran E, Fresquet V, Martinez-Useros J, Richter-Larrea JA, Sagardoy A, Sesma I, Almada LL, Montes-Moreno S, Siebert R, Gesk S, Calasanz MJ, Malumbres R, Rieger M, Prosper F, Lossos IS, Piris MA, Fernandez-Zapico ME, Martinez-Climent JA. Proceedings of the National Academy of Sciences of the United States of America 2011 Jul 108 (30): 12461-6. PMID: 21746927