

CCND1 / Cyclin D1 Antibody (clone E16-I)
Rabbit Polyclonal Antibody
Catalog # ALS16793**Specification****CCND1 / Cyclin D1 Antibody (clone E16-I) - Product Information**

Application	IHC
Primary Accession	P24385
Other Accession	595
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	33729

CCND1 / Cyclin D1 Antibody (clone E16-I) - Additional Information**Gene ID** 595**Other Names**

CCND1, B-cell lymphoma 1 protein, BCL-1 oncogene, B-cell CLL/lymphoma 1, BCL-1, Cyclin D1, G1/S-specific cyclin-D1, U21B31, PRAD1, BCL1, D11S287E, PRAD1 oncogene

Reconstitution & Storage

20 mM Tris-HCl, pH 8.0, 20 mg/ml BSA stabilizer, 0.05% NaN₃ preservative. +4°C, avoid freezing

Precautions

CCND1 / Cyclin D1 Antibody (clone E16-I) is for research use only and not for use in diagnostic or therapeutic procedures.

CCND1 / Cyclin D1 Antibody (clone E16-I) - 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: [1833066](http://www.uniprot.org/citations/1833066), PubMed: [1827756](http://www.uniprot.org/citations/1827756), PubMed: [8114739](http://www.uniprot.org/citations/8114739), PubMed: [8302605](http://www.uniprot.org/citations/8302605), PubMed: [19412162](http://www.uniprot.org/citations/19412162), PubMed: [33854235](http://www.uniprot.org/citations/33854235)). 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: [1833066](http://www.uniprot.org/citations/1833066), PubMed: [1827756](http://www.uniprot.org/citations/1827756), PubMed: [8114739](http://www.uniprot.org/citations/8114739), PubMed: [8302605](http://www.uniprot.org/citations/8302605), PubMed: [19412162](http://www.uniprot.org/citations/19412162), PubMed: [33854235](http://www.uniprot.org/citations/33854235)).

[8302605](http://www.uniprot.org/citations/8302605), PubMed: [19412162](http://www.uniprot.org/citations/19412162)). Hypophosphorylates RB1 in early G(1) phase (PubMed: [1833066](http://www.uniprot.org/citations/1833066), PubMed: [1827756](http://www.uniprot.org/citations/1827756), PubMed: [8114739](http://www.uniprot.org/citations/8114739), PubMed: [8302605](http://www.uniprot.org/citations/8302605), PubMed: [19412162](http://www.uniprot.org/citations/19412162)). Cyclin D-CDK4 complexes are major integrators of various mitogenic and antimitogenic signals (PubMed: [1833066](http://www.uniprot.org/citations/1833066), PubMed: [1827756](http://www.uniprot.org/citations/1827756), PubMed: [8302605](http://www.uniprot.org/citations/8302605), PubMed: [19412162](http://www.uniprot.org/citations/19412162)). Also a substrate for SMAD3, phosphorylating SMAD3 in a cell-cycle-dependent manner and repressing its transcriptional activity (PubMed: [15241418](http://www.uniprot.org/citations/15241418)). Component of the ternary complex, cyclin D1/CDK4/CDKN1B, required for nuclear translocation and activity of the cyclin D-CDK4 complex (PubMed: [9106657](http://www.uniprot.org/citations/9106657)). Exhibits transcriptional corepressor activity with INSM1 on the NEUROD1 and INS promoters in a cell cycle-independent manner (PubMed: [16569215](http://www.uniprot.org/citations/16569215), PubMed: [18417529](http://www.uniprot.org/citations/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

Volume

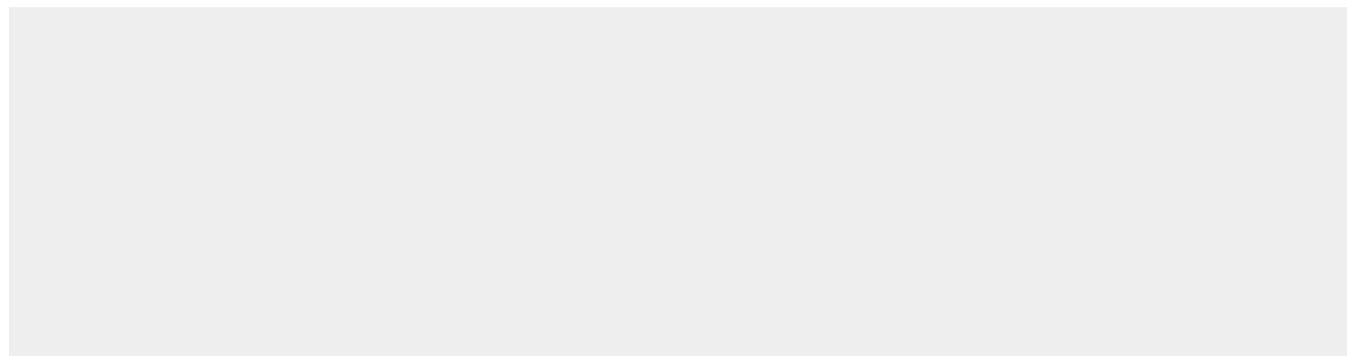
50 µl

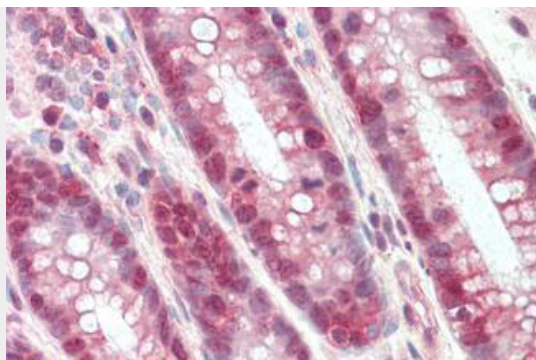
CCND1 / Cyclin D1 Antibody (clone E16-I) - Protocols

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](#)

CCND1 / Cyclin D1 Antibody (clone E16-I) - Images





Anti-CCND1 / Cyclin D1 antibody IHC staining of human colon.

CCND1 / Cyclin D1 Antibody (clone E16-I) - Background

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. 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. Hypophosphorylates RB1 in early G(1) phase. Cyclin D-CDK4 complexes are major integrators of various mitogenic and antimitogenic signals. Also substrate for SMAD3, phosphorylating SMAD3 in a cell-cycle-dependent manner and repressing its transcriptional activity. Component of the ternary complex, cyclin D1/CDK4/CDKN1B, required for nuclear translocation and activity of the cyclin D-CDK4 complex. Exhibits transcriptional corepressor activity with INSM1 on the NEUROD1 and INS promoters in a cell cycle-independent manner.

CCND1 / Cyclin D1 Antibody (clone E16-I) - References

- Motokura T.,et al.Nature 350:512-515(1991).
- Lew D.J.,et al.Cell 66:1197-1206(1991).
- Xiong Y.,et al.Cell 65:691-699(1991).
- Withers D.A.,et al.Mol. Cell. Biol. 11:4846-4853(1991).
- Rimokh R.,et al.Blood 83:3689-3696(1994).