

# CCND3 antibody - C-terminal region

Rabbit Polyclonal Antibody

Catalog # AI16182

## Product Information

Application	WB, IHC
Primary Accession	<a href="#">P30281</a>
Other Accession	<a href="#">NM_001760</a> , <a href="#">NP_001751</a>
Reactivity	Human, Mouse, Rat, Pig, Dog, Guinea Pig, Bovine, Sheep
Predicted	Human, Mouse, Rat, Pig, Chicken, Dog, Guinea Pig, Bovine, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	32520

## Additional Information

Gene ID	896
Other Names	G1/S-specific cyclin-D3, CCND3
Format	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
Reconstitution & Storage	Add 50 ul of distilled water. Final anti-CCND3 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.
Precautions	CCND3 antibody - C-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

Name	CCND3 {ECO:0000303   PubMed:1386336, ECO:0000312   HGNC:HGNC:1585}
Function	Regulatory component of the cyclin D3-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: <a href="#">8114739</a> ). 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: <a href="#">8114739</a> ). Hypophosphorylates RB1 in early G(1) phase (PubMed: <a href="#">8114739</a> ). Cyclin D- CDK4 complexes are major integrators of various mitogenic and antimitogenic signals (PubMed: <a href="#">8114739</a> ). Component of the ternary complex, cyclin D3/CDK4/CDKN1B, required for nuclear translocation and activity of the cyclin D-CDK4 complex (PubMed: <a href="#">16782892</a> ). Shows transcriptional coactivator

activity with ATF5 independently of CDK4 (PubMed:[15358120](#)).

## Cellular Location

Nucleus. Cytoplasm

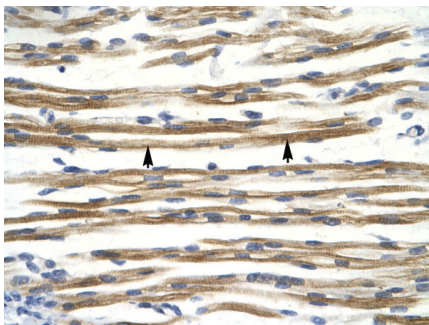
## Background

Regulatory component of the cyclin D3-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 D3/CDK4/CDKN1B, required for nuclear translocation and activity of the cyclin D-CDK4 complex.

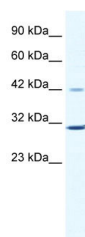
## References

- Xiong Y.,et al.Genomics 13:575-584(1992).  
Motokura T.,et al.J. Biol. Chem. 267:20412-20415(1992).  
Li W.B.,et al.Submitted (APR-2003) to the EMBL/GenBank/DDBJ databases.  
Ota T.,et al.Nat. Genet. 36:40-45(2004).  
Ebert L.,et al.Submitted (JUN-2004) to the EMBL/GenBank/DDBJ databases.

## Images



Human Muscle



WB Suggested Anti-CCND3 Antibody Titration: 0.2-1 µg/ml  
ELISA Titer: 1:62500  
Positive Control: Jurkat cell lysate  
CCND3 is supported by BioGPS gene expression data to be expressed in Jurkat

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.