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CCND3 antibody - C-terminal region
Rabbit Polyclonal Antibody
Catalog # AI16182

Specification

CCND3 antibody - C-terminal region - Product Information

Application	**IHC, WB**
Primary Accession	P30281
Other Accession	NM_001760, NP_001751
Reactivity	**Human, Mouse, Rat, Pig, Sheep, Bovine, Guinea Pig, Dog**
Predicted	**Human, Mouse, Rat, Pig, Chicken, Sheep, Bovine, Guinea Pig, Dog**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**33kDa KDa**

CCND3 antibody - C-terminal region - 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.

CCND3 antibody - C-terminal region - 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:8114739). 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:8114739). Hypophosphorylates RB1 in early G(1) phase (PubMed:<a

href="http://www.uniprot.org/citations/8114739" target="_blank">8114739). Cyclin D- CDK4 complexes are major integrators of various mitogenenic and antimitogenic signals (PubMed:8114739). Component of the ternary complex, cyclin D3/CDK4/CDKN1B, required for nuclear translocation and activity of the cyclin D-CDK4 complex (PubMed:16782892). Shows transcriptional coactivator activity with ATF5 independently of CDK4 (PubMed:15358120).

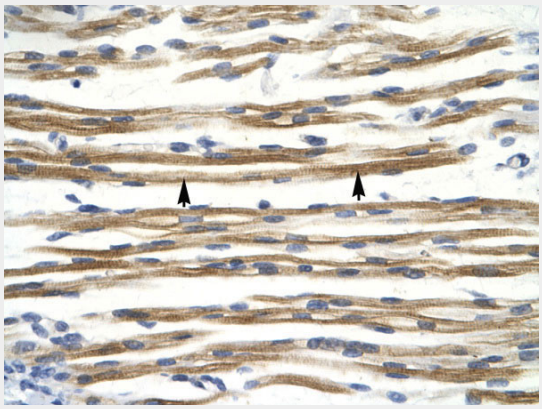
Cellular Location
Nucleus. Cytoplasm

CCND3 antibody - C-terminal region - Protocols

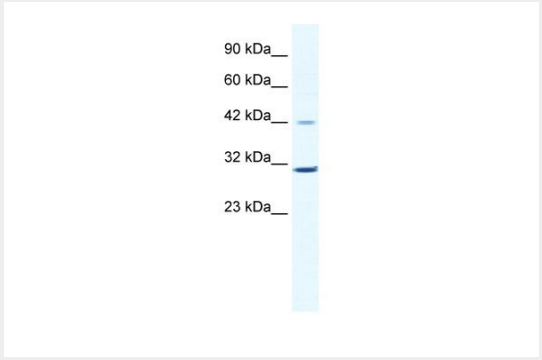
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

CCND3 antibody - C-terminal region - Images



Human Muscle



WB Suggested Anti-CCND3 Antibody Titration: 0.2-1 µg/ml

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ELISA Titer: 1:62500
Positive Control: Jurkat cell lysate
CCND3 is supported by BioGPS gene expression data to be expressed in Jurkat

CCND3 antibody - C-terminal region - 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 mitogenenic 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.

CCND3 antibody - C-terminal region - 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.