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CCND3 antibody - C-terminal region

Rabbit Polyclonal Antibody
Catalog # AI16182

Product Information

Application	WB, IHC
Primary Accession	P30281
Other Accession	NM_001760, NP_001751
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: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: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

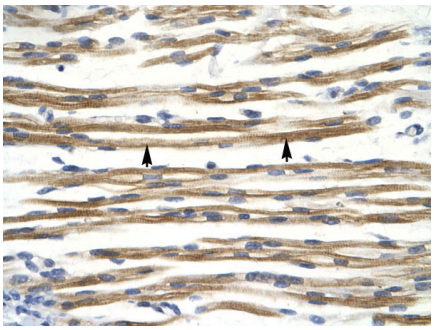
Background

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.

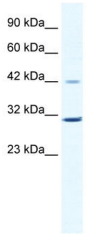
References

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'.