

CCND3 antibody - C-terminal region

Rabbit Polyclonal Antibody Catalog # Al16182

Specification

CCND3 antibody - C-terminal region - Product Information

Application Primary Accession Other Accession Reactivity

Predicted

Host Clonality Calculated MW WB, IHC <u>P30281</u> <u>NM_001760</u>, <u>NP_001751</u> Human, Mouse, Rat, Pig, Sheep, Bovine, Guinea Pig, Dog Human, Mouse, Rat, Pig, Chicken, Sheep, Bovine, Guinea Pig, Dog Rabbit Polyclonal 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:8114739).



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.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

CCND3 antibody - C-terminal region - Images



Human Muscle



WB Suggested Anti-CCND3 Antibody Titration: 0.2-1 $\mu\text{g/ml}$



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.