

Cyclin D3 (Phospho-Thr283) Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP52373

Specification

Cyclin D3 (Phospho-Thr283) Antibody - Product Information

Application WB, IHC Primary Accession P30281

Reactivity Human, Mouse, Rat

Host Rabbit
Clonality Polyclonal
Calculated MW 32520

Cyclin D3 (Phospho-Thr283) Antibody - Additional Information

Gene ID 896

Other Names

G1/S-specific cyclin-D3, CCND3

Dilution

WB~~1:1000 IHC~~1:50~100

Format

Rabbit IgG in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.09% (W/V) sodium azide and 50% glycerol.

Storage Conditions

-20°C

Cyclin D3 (Phospho-Thr283) Antibody - 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:<a href="http://www.uniprot.org/citations/8114739" target="http://www.uniprot.org/citations/8114739" target="http://www.unipr

href="http://www.uniprot.org/citations/8114739" target="_blank">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).

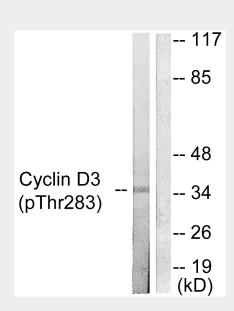
Cellular Location Nucleus. Cytoplasm

Cyclin D3 (Phospho-Thr283) Antibody - Protocols

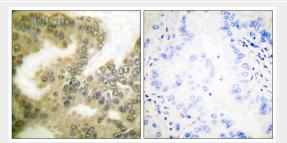
Provided below are standard protocols that you may find useful for product applications.

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

Cyclin D3 (Phospho-Thr283) Antibody - Images



Western blot analysis of extracts from K562 cells treated with UV (5mins), using Cyclin D3 (Phospho-Thr283) Antibody (#A0418).



Immunohistochemical analysis of paraffin-embedded human lung carcinoma tissue using Cyclin D3 (Phospho-Thr283) Antibody (#A0418).



Cyclin D3 (Phospho-Thr283) Antibody - 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.

Cyclin D3 (Phospho-Thr283) Antibody - 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. Submitted (JUN-2004) to the EMBL/GenBank/DDBJ databases.