

Anti-Cyclin D3 Picoband Antibody
Catalog # ABO11810**Specification****Anti-Cyclin D3 Picoband Antibody - Product Information**

Application	WB
Primary Accession	P30281
Host	Rabbit
Reactivity	Human, Rat
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for G1/S-specific cyclin-D3(CCND3) detection. Tested with WB in Human;Rat.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-Cyclin D3 Picoband Antibody - Additional Information

Gene ID 896

Other Names

G1/S-specific cyclin-D3, CCND3

Calculated MW

32520 MW KDa

Application Details

Western blot, 0.1-0.5 µg/ml, Human, Rat

Subcellular Localization

Nucleus . Cytoplasm . Membrane . Cyclin D-CDK4 complexes accumulate at the nuclear membrane and are then translocated to the nucleus through interaction with KIP/CIP family members. .

Protein Name

G1/S-specific cyclin-D3

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen

E.coli-derived human Cyclin D3 recombinant protein (Position: Q136-L292). Human Cyclin D3 shares 94% and 93% amino acid (aa) sequences identity with mouse and rat Cyclin D3, respectively.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.

Sequence Similarities

Belongs to the cyclin family. Cyclin D subfamily.

Anti-Cyclin D3 Picoband 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: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

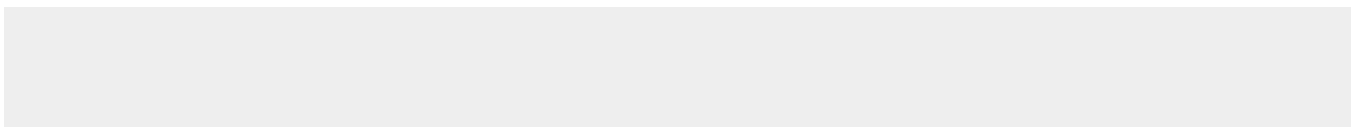
Nucleus. Cytoplasm

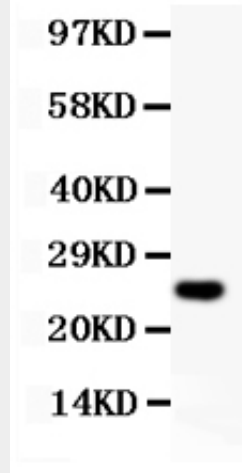
Anti-Cyclin D3 Picoband Antibody - Protocols

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

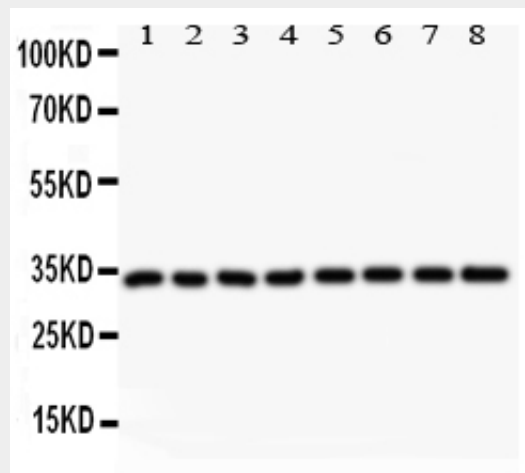
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-Cyclin D3 Picoband Antibody - Images





Anti-Cyclin D3 Picoband antibody, ABO11810-1.jpg All lanes: Anti Cyclin D3 (ABO11810) at 0.5ug/ml WB: Recombinant Human Cyclin D3 Protein 0.5ng Predicted bind size: 25KD Observed bind size: 25KD



Anti-Cyclin D3 Picoband antibody, ABO11810-2.jpg All lanes: Anti Cyclin D3 (ABO11810) at 0.5ug/ml Lane 1: Rat Testis Tissue Lysate at 50ug Lane 2: Rat Thymus Tissue Lysate at 50ug Lane 3: Rat Lung Tissue Lysate at 50ug Lane 4: Rat Ovary Tissue Lysate at 50ug Lane 5: JURKAT Whole Cell Lysate at 40ug Lane 6: A549 Whole Cell Lysate at 40ug Lane 7: MCF-7 Whole Cell Lysate at 40ug Lane 8: HELA Whole Cell Lysate at 40ug Predicted bind size: 33KD Observed bind size: 33KD

Anti-Cyclin D3 Picoband Antibody - Background

CCND3, also called Cyclin D3, is a protein that in humans is encoded by the CCND3 gene. It is mapped to 6p21.1. The protein encoded by this gene belongs to the highly conserved cyclin family, whose members are characterized by a dramatic periodicity in protein abundance through the cell cycle. Cyclins function as regulators of CDK kinases. Different cyclins exhibit distinct expression and degradation patterns which contribute to the temporal coordination of each mitotic event. This cyclin forms a complex with and functions as a regulatory subunit of CDK4 or CDK6, whose activity is required for cell cycle G1/S transition. In addition, overexpression of CCND3 upregulated the translational activity in HeLa cells in a dose-dependent manner.