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Anti-Cyclin D3 Picoband Antibody

Catalog # ABO11810

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.

Additional Information

Gene ID	896
Other Names	G1/S-specific cyclin-D3, CCND3
Calculated MW	32520
Application Details	Western blot, 0.1-0.5 □g/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. .
Source	Eukaryota
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.

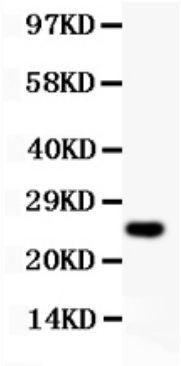
Protein Information

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

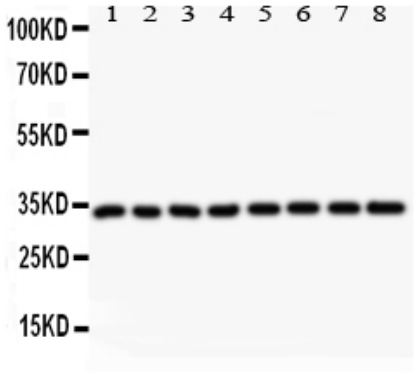
CCND3, also called Cyclin D3, is a protein that in humans is encoded by the CCND3 gene. It is mapped to 6p21.1. The protein encoded by this gene belongs to the highly conserved cyclin family, whose members are characterized by a dramatic periodicity in protein abundance through the cell cycle. Cyclins 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 activtiy 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.

Images



Anti-Cyclin D3 Picoband antibody, ABO11810-1.jpgAll lanes: Anti Cyclin D3 (ABO11810) at 0.5ug/mlWB: Recombinant Human Cyclin D3 Protein 0.5ngPredicted bind size: 25KDObserved bind size: 25KD

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



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.