

Anti-Cyclin D1 (pT288) Antibody

Rabbit polyclonal antibody to Cyclin D1 (pT288) Catalog # AP61099

Product Information

ApplicationWBPrimary AccessionP24385Other AccessionP25322

Reactivity Human, Mouse, Rat

Host Rabbit
Clonality Polyclonal
Calculated MW 33729

Additional Information

Gene ID 595

Other Names BCL1; PRAD1; G1/S-specific cyclin-D1; B-cell lymphoma 1 protein; BCL-1;

BCL-1 oncogene; PRAD1 oncogene

Target/Specificity Recognizes endogenous levels of Cyclin D1 (pT288) protein.

Dilution WB~~WB (1/500 - 1/1000)

Format Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30%

glycerol, and 0.09% (W/V) sodium azide.

Storage Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

Name CCND1 {ECO:0000303 | PubMed:8204893, ECO:0000312 | HGNC:HGNC:1582}

Function Regulatory component of the cyclin D1-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:1827756, PubMed:1833066, PubMed:19412162, PubMed:33854235,

PubMed:<u>8114739</u>, PubMed:<u>8302605</u>). 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:<u>1827756</u>, PubMed:<u>1833066</u>,

PubMed: <u>19412162</u>, PubMed: <u>8114739</u>, PubMed: <u>8302605</u>).

Hypophosphorylates RB1 in early G(1) phase (PubMed:<u>1827756</u>, PubMed:<u>1833066</u>, PubMed:<u>19412162</u>, PubMed:<u>83114739</u>, PubMed:<u>8302605</u>).

Cyclin D-CDK4 complexes are major integrators of various mitogenenic and

antimitogenic signals (PubMed: 1827756, PubMed: 1833066,

PubMed:19412162, PubMed:8302605). Also a substrate for SMAD3,

phosphorylating SMAD3 in a cell-cycle-dependent manner and repressing its transcriptional activity (PubMed:15241418). Component of the ternary complex, cyclin D1/CDK4/CDKN1B, required for nuclear translocation and activity of the cyclin D-CDK4 complex (PubMed:9106657). Exhibits transcriptional corepressor activity with INSM1 on the NEUROD1 and INS promoters in a cell cycle-independent manner (PubMed:16569215, PubMed:18417529).

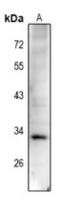
Cellular Location

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

Background

KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human Cyclin D1. The exact sequence is proprietary.

Images



Western blot analysis of Cyclin D1 (pT288) expression in HCT116 (A) whole cell lysates.

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