

Product datasheet

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ARG41694 anti-Cyclin D2 antibody

Package: 100 μl Store at: -20°C

Summary

Product Description Rabbit Polyclonal antibody recognizes Cyclin D2

Tested Reactivity Hu, Ms, Rat

Tested Application WB

Host Rabbit

Clonality Polyclonal

Isotype IgG

Target Name Cyclin D2

Species Human

Immunogen Recombinant fusion protein corresponding to aa. 1-289 of Human Cyclin D2 (NP_001750.1).

Conjugation Un-conjugated

Alternate Names KIAK0002; MPPH3; G1/S-specific cyclin-D2

Application Instructions

Application table	Application	Dilution
	WB	1:500 - 1:2000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	Rat lung	
Observed Size	~37 kDa	

Properties

Form Liquid

Purification Affinity purified.

Buffer PBS (pH 7.3), 0.02% Sodium azide and 50% Glycerol.

Preservative 0.02% Sodium azide

Stabilizer 50% Glycerol

Storage instruction For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol

CCND2

Gene Full Name

cyclin D2

Background

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 CDK4 or CDK6 and functions as a regulatory subunit of the complex, whose activity is required for cell cycle G1/S transition. This protein has been shown to interact with and be involved in the phosphorylation of tumor suppressor protein Rb. Knockout studies of the homologous gene in mouse suggest the essential roles of this gene in ovarian granulosa and germ cell proliferation. High level expression of this gene was observed in ovarian and testicular tumors. Mutations in this gene are associated with megalencephaly-polymicrogyria-polydactyly-hydrocephalus syndrome 3 (MPPH3). [provided by RefSeq, Sep 2014]

Function

Regulatory component of the cyclin D2-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 D2/CDK4/CDKN1B, required for nuclear translocation and activity of the cyclin D-CDK4 complex (By similarity). [UniProt]

Calculated Mw

33 kDa

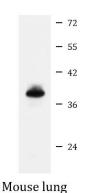
ртм

Polyubiquitinated by the SCF(FBXL2) complex, leading to proteasomal degradation. [UniProt]

Cellular Localization

Cytoplasm, Membrane, Nucleus. [UniProt]

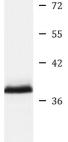
Images



ARG41694 anti-Cyclin D2 antibody WB image

ARG41694 anti-Cyclin D2 antibody WB image

Western blot: 25 µg of Mouse lung lysate stained with ARG41694 anti-Cyclin D2 antibody at 1:1000 dilution.



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Rat lung

Western blot: 25 µg of Rat lung lysate stained with ARG41694 anti-Cyclin D2 antibody at 1:1000 dilution.