

ARG54053 anti-Cyclin D2 antibody

Package: 100 μl Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody recognizes Cyclin D2
Tested Reactivity	Hu
Tested Application	WB
Host	Mouse
Clonality	Monoclonal
Isotype	lgG2b
Target Name	Cyclin D2
Species	Human
Immunogen	Purified recombinant human Cyclin D2 protein fragments expressed in E.coli.
Conjugation	Un-conjugated
Alternate Names	KIAK0002; MPPH3; G1/S-specific cyclin-D2

Application Instructions

Application table	Application	Dilution
	WB	1:1000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Observed Size	38 kDa	

Properties

Form	Liquid
Purification	Affinity purified
Buffer	PBS (pH 7.4), 0.02% Sodium azide and 50% Glycerol
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol
Concentration	1.9 mg/ml
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

Database links	GenelD: 894 Human
	Swiss-port # P30279 Human
Gene Symbol	CCND2
Gene Full Name	cyclin D2
Background	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 G1/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 G1 phase.Hypophosphorylates RB1 in early G1 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.
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]
Research Area	Cancer antibody; Cell Biology and Cellular Response antibody; Gene Regulation antibody
Calculated Mw	33 kDa
PTM	Polyubiquitinated by the SCF(FBXL2) complex, leading to proteasomal degradation.
Cellular Localization	Nucleus. Cytoplasm. Membrane. Note: Cyclin D-CDK4 complexes accumulate at the nuclear membrane and are then translocated into the nucleus through interaction with KIP/CIP family members.

Images



ARG54053 anti-Cyclin D2 antibody WB image

Western blot: CHO-K1 transfected by Cyclin D2-fragment EGFP and stained with ARG54053 anti-Cyclin D2 antibody at 1:1000 dilution.