

ARG58019 anti-Cyclin D3 antibody

Package: 50 µg
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes Cyclin D3
Tested Reactivity	Hu, Rat
Tested Application	FACS, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	Cyclin D3
Species	Human
Immunogen	Partial recombinant protein corresponding to aa. 136-292 of Human Cyclin D3.
Conjugation	Un-conjugated
Alternate Names	G1/S-specific cyclin-D3

Application Instructions

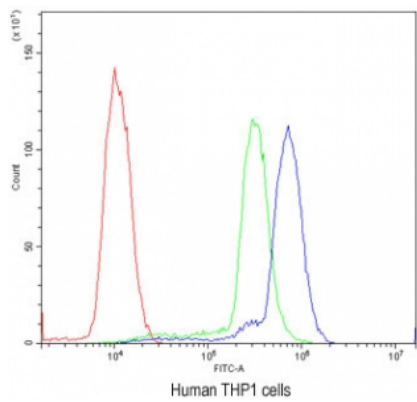
Application table	Application	Dilution
	FACS	1 - 3 µg/10 ⁶ cells
	WB	0.5 - 1 µg/ml
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

Properties

Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	PBS, 0.025% Sodium azide and 2.5% BSA.
Preservative	0.025% Sodium azide
Stabilizer	2.5% BSA
Concentration	0.5 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 or below. 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.

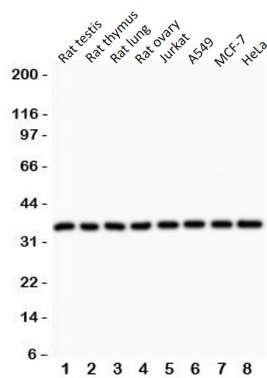
Gene Symbol	CCND3
Gene Full Name	cyclin D3
Background	The protein encoded by this gene belongs to the highly conserved cyclin family, whose members are characterized by a dramatic periodicity in protein abundance through the cell cycle. Cyclins function as regulators of CDK kinases. Different cyclins exhibit distinct expression and degradation patterns which contribute to the temporal coordination of each mitotic event. This cyclin forms a complex with and functions as a regulatory subunit of CDK4 or CDK6, 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. The CDK4 activity associated with this cyclin was reported to be necessary for cell cycle progression through G2 phase into mitosis after UV radiation. Several transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Oct 2008]
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. 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 mitogenic 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 D3/CDK4/CDKN1B, required for nuclear translocation and activity of the cyclin D-CDK4 complex. [UniProt]
Calculated Mw	33 kDa
PTM	Polyubiquitinated by the SCF(FBXL2) complex, leading to proteasomal degradation. [UniProt]

Images



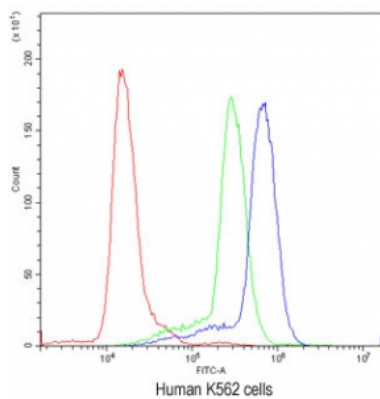
ARG58019 anti-Cyclin D3 antibody FACS image

Flow Cytometry: Human THP1 cells stained with ARG58019 anti-Cyclin D3 antibody at 1 µg/10⁶ cells (blocked with goat sera). Red: Cells alone, Green: Isotype control, Blue: Primary antibody.



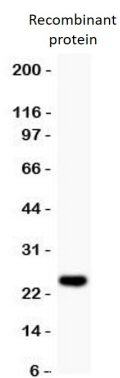
ARG58019 anti-Cyclin D3 antibody WB image

Western blot: 1) Rat testis, 2) Rat thymus, 3) Rat lung, 4) Rat ovary, 5) Jurkat, 6) A549, 7) MCF-7 and 8) HeLa lysates stained with ARG58019 anti-Cyclin D3 antibody.



ARG58019 anti-Cyclin D3 antibody FACS image

Flow Cytometry: K562 cells stained with ARG58019 anti-Cyclin D3 antibody at $1 \mu\text{g}/10^6$ cells (blocked with goat sera). Red: Cells alone, Green: Isotype control, Blue: Primary antibody.



ARG58019 anti-Cyclin D3 antibody WB image

Western blot: 0.5 ng of recombinant Human protein stained with ARG58019 anti-Cyclin D3 antibody.