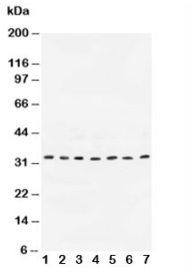
Cyclin D1 Antibody (R30349)

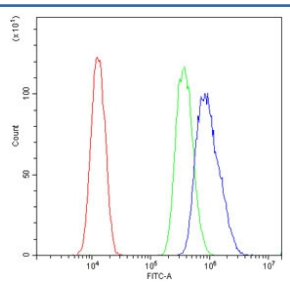
Catalog No.	Formulation	Size
R30349	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide/thimerosal
UniProt	P24385
Applications	Western blot: 0.5-1ug/ml Flow cytometry: 1-3ug/10^6 cells
Limitations	This Cyclin D1 antibody is available for research use only.



Western blot testing of Cyclin D1 antibody and Lane 1: rat testis; 2: human placenta; 3: rat brain; 4: MCF-7; 5: COLO320; 6: SW620; 7: MM231. Predicted molecular weight: 32-36 kDa.



Flow cytometry testing of human U-87 MG cells with Cyclin D1 antibody at 1ug/10^6 cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= Cyclin D1 antibody.

Description

Cyclin D1, also known as CCND1, belongs to the highly conserved cyclin family whose members are characterized by a dramatic periodicity in protein abundance throughout the cell cycle. CCND1 encodes the regulatory subunit of a holoenzyme that phosphorylates and inactivates the retinoblastoma protein and promotes progression through the G1-S phase of the cell cycle. Amplification or overexpression of the protein plays pivotal roles in the development of a subset of human cancers including parathyroid adenoma, breast cancer, colon cancer, lymphoma, melanoma, and prostate cancer. The gene is overexpressed in breast cancers and is required for oncogene-induced tumorigenesis. Brisken et al. (2003) found that prolactin (PRL; 176760) induced IGF2 (147470) mRNA and IGF2 induced cyclin D1 protein expression in mouse mammary epithelial cultures. They also concluded that IGF2 is a mediator of prolactin-induced alveologenesis and that prolactin, IGF2, and Cyclin D1 are components of a developmental pathway in mammary gland.

Application Notes

The stated application concentrations are suggested starting points. Titration of the Cyclin D1 antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

Amino acids 19-37 (DANLLNDRVLRAMLKAEET) were used as the immunogen for this Cyclin D1 antibody.

Storage

After reconstitution, the Cyclin D1 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

Copyright © NSJ Bioreagents. All rights reserved.