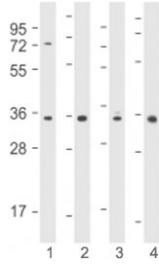


Cyclin D1 [clone 1849CT557.93.5] (F54095)

Catalog No.	Formulation	Size
F54095-0.2ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.2 ml
F54095-0.05ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.05 ml

[Bulk quote request](#)

Availability	1-3 business days
Species Reactivity	Human, Mouse
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	1849CT557.93.5
Purity	Protein G purified
UniProt	P24385
Applications	Western Blot : 1:2000
Limitations	This Cyclin D1 antibody is available for research use only.



Western blot testing using Cyclin D1 antibody at 1:2000 : Lane 1) human MCF7, 2) human HT-1080, 3) mouse L929 and 4) mouse NIH3T3 cell lysate. Predicted molecular weight: 32-36 kDa.

Description

Cyclin D1 / CCND1 is the 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. 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 D1/CDK4/CDKN1B, required for nuclear translocation and activity of the cyclin D-CDK4 complex. Exhibits transcriptional corepressor activity with INSM1 on the NEUROD1 and INS promoters in a cell cycle-independent manner. [UniProt]

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

Recombinant human Cyclin D1 was used as the immunogen for the Cyclin D1 antibody.

Storage

Aliquot the Cyclin D1 antibody and store frozen at -20°C or colder. Avoid repeated freeze-thaw cycles.