

Product name:	Cyclin D1 (phospho Thr286) Rabbit Polyclonal Antibody
Cat number:	ABN04521
Conjugate:	Unconjugated
Size:	100µL
Clone:	Polyclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	The antiserum was produced against synthesized peptide derived from human Cyclin D1 around the phosphorylation site of Thr286. AA range:246-295
Reactivity:	Human,Mouse,Rat
Applications:	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:5000-1:20000
Molecular Weight:	33kDa
Purification:	Affinity purification
Form:	Liquid
Buffer:	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.

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 throughout 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 tumor suppressor protein Rb and the expression of this gene is regulated positively by Rb. Mutations, amplification and overexpression of this gene, which alters cell cycle progression, are observed frequently in a variety of tumors and may contribute to tumorigenesis. [provided by RefSeq, Jul 2008],disease:A chromosomal aberration involving CCND1 may be a cause of B-lymphocytic malignancy, particularly mantle-cell lymphoma (MCL). Translocation t(11;14)(q13;q32) with immunoglobulin gene regions. Activation of CCND1 may be oncogenic by directly altering progression through the cell cycle.,disease:A chromosomal aberration involving CCND1 may be a cause of multiple myeloma [MIM:254500]. Translocation t(11;14)(q13;q32) with the IgH locus.,disease:A chromosomal aberration involving CCND1 may be a cause of parathyroid adenomas [MIM:168461]. Translocation t(11;11)(q13;p15) with the parathyroid hormone (PTH) enhancer.,function:Essential for the control of the cell cycle at the G1/S (start) transition.,online information:The Singapore human mutation and polymorphism database,PTM:Following DNA damage it is ubiquitinated by some SCF (SKP1-cullin-F-box) protein ligase complex containing FBXO31. Ubiquitination leads to its degradation and G1 arrest.,PTM:Phosphorylation at Thr-286 by MAP kinases is required for ubiquitination and degradation following DNA damage. It probably plays an essential role for recognition by the FBXO31 component of SCF (SKP1-cullin-F-box) protein ligase complex.,similarity:Belongs to the cyclin family.,similarity:Belongs to the cyclin family. Cyclin D subfamily.,subunit:Interacts with the CDK4 and CDK6 protein kinases to form a serine/threonine kinase holoenzyme complex. The cyclin subunit imparts substrate specificity to the complex.,