



Cyclin D1 Polyclonal Antibody

E91301

Catalog Number: E91301**Amount:** 100ul

Background: Activity of the cyclin-dependent kinases CDK4 and CDK6 is regulated by T-loop phosphorylation, by the abundance of their cyclin partners (the D-type cyclins), and by association with CDK inhibitors of the Cip/Kip or INK family of proteins (1). The inactive ternary complex of cyclin D/CDK4 and p27 Kip1 requires extracellular mitogenic stimuli for the release and degradation of p27 concomitant with a rise in cyclin D levels to affect progression through the restriction point and Rb-dependent entry into S-phase (2). The active complex of cyclin D/CDK4 targets the retinoblastoma protein for phosphorylation, allowing the release of E2F transcription factors that activate G1/S-phase gene expression (3). Levels of cyclin D protein drop upon withdrawal of growth factors through downregulation of protein expression and phosphorylation-dependent degradation (4). Of the three D cyclins, aberrant expression of cyclin D1 has been associated with many forms of cancer including B cell lymphomas and can directly contribute to oncogenesis by various mechanisms including gene translocation or amplification (2). Cyclin D1 also plays a critical role in mammary tissue maturation (5).

Species: Rabbit**Isotype:** IgG

Storage/Stability: Store at -20oC or -80oC. Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3.

Synonyms: CCND1;BCL1; D11S287E; PRAD1; U21B31;**Immunogen:** Recombinant protein of human Cyclin D1**Purification:** Affinity purification**Reactivity:** H M R**Applications:** WB IHC**Molecular Weight:** 34kDa**Swiss-Prot No. :** P24385**Gene ID:** 595

References: 1. Hirai, H. et al. (1995) Mol. Cell. Biol. 15, 2672-2681. 2. Sherr, C.J. (1996) Science 274, 1672-1677. 3. Lukas, J. et al. (1996) Mol. Cell. Biol. 16, 6917-6925. 4. Diehl, J.A. et al. (1997) Genes Dev. 11, 957-972. 5. Sicinski, P. et al. (1995) Cell 82, 621-630.

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