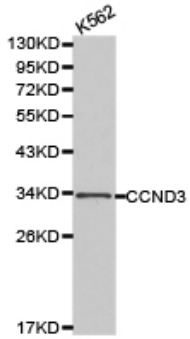
CCND3Polyclonal Antibody

E91084

Catalog Number: E91084
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). Although the D-type cyclins are not fully redundant, cyclin D3, like D1, plays a prominent role in differentiation and proliferation, which correlates with higher expression levels of cyclin D3 in various cancers (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: CCND3
Immunogen: Recombinant proteinof human CCND3
Purification: Affinity purification
Reactivity: H M R
Applications: WB IHC
Molecular Weight: 33kDa
Swiss-Prot No. : P30281
Gene ID: 896
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. Bartkova, J. et al. (1998) Cyclin D3: requirement for G1/S transition and high abundance in quiescent tissues suggest a dual role in proliferation and differentiation. Oncogene 17, 1027-1037.

For Research Use Only

WB 1:500 - 1:2000
IHC 1:50- 1:200



Western blot analysis of K562 cell lysate using CCND3 antibody.