



## CCND3 Antibody

#24217

**Catalog Number:** 24217-1, 24217-2

**Amount:** 50µg/50µl, 100µg/100µl

**Swiss-Prot No. :** P30281

**Form of Antibody:** Rabbit IgG in phosphate buffered saline (without Mg<sup>2+</sup> and Ca<sup>2+</sup>), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.

**Storage/Stability:** Store at -20°C/1 year

**Immunogen:** The antiserum was produced against synthesized peptide derived from Human CCND3

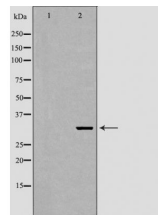
**Purification:** The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.

**Specificity/Sensitivity:** CCND3 Antibody detects endogenous levels of total CCND3

**Reactivity:** Human, Mouse, Rat

### Applications:

Predicted MW: 33kd    WB: 1:500-2000    IHC: 1:50-200



Western blot analysis of K562 cell lysate using CCND3 antibody.

### 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 . 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 . 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 . Levels of cyclin D protein drop upon withdrawal of growth factors through downregulation of protein expression and phosphorylation-dependent degradation . 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 .