Polyclonal Anti- Cyclin D1 (Sepharose Bead Conjugate)

Catalogue No. PA1245-S

Lot No. 09G01

Ig type: rabbit IgG

Size: 100µg/vial

Specificity

Human, rat, mouse.
No cross reactivity
with other proteins.

Recommended application

(Immunoprecipitation(IP)

Immunogen

A synthetic peptide corresponding to a sequence at the N-terminal of human Cyclin D1, different to the related mouse sequence by two amino acids.

Purification

Immunogen affinity purified.

Formulation

50% slurry in PBS pH 7.2 with 0.01mg NaN_3a_3 preservative.

Storage

Store at 4˚C for frequent use.

Description:

This Antagene antibody is immobilized via covalent binding of primary amino groups to N-hydroxysuccinimide (NHS)-activated sepharose beads. It is useful for immunoprecipitation assays

BACKGROUND

Cyclin D1, also known as CCND1, is a human gene.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. Cyclin D1 encodes the regulatory subunit of a holoenzyme that phosphorylates and inactivates the retinoblastoma protein and promotes progression through the G1-S phase of the cell cycle. Amplification or overexpression of cyclin D1 plays pivotal roles in the development of a subset of human cancers including parathyroid adenoma, breast cancer, colon cancer, lymphoma, melanoma, and prostate cancer.1 The cyclin D1 gene is overexpressed in human breast cancers and is required for oncogene-induced tumorigenesis.2 Brisken et al. (2003) found that prolactin (PRL; 176760) induced IGF2 (147470) mRNA and IGF2 induced cyclin D1 protein expression in mouse mammary epithelial cultures. And they also concluded that IGF2 is a mediator of prolactin-induced alveologenesis and that prolactin, IGF2, and cyclin D1 are components of a developmental pathway in mammary gland.3

REFERENCE

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2. Wang, C.; Pattabiraman, N.; Zhou, J. N.; Fu, M.; Sakamaki, T.; Albanese, C.; Li, Z.; Wu, K.; Hulit, J.; Neumeister, P.; Novikoff, P. M.; Brownlee, M.; Scherer, P. E.; Jones, J. G.; Whitney, K. D.; Donehower, L. A.; Harris, E. L.; Rohan, T.; Johns, D. C.; Pestell, R. G. : Cyclin D1 repression of peroxisome proliferator-activated receptor gamma expression and transactivation. *Molec. Cell. Biol.* 23: 6159-6173, 2003.

3. Brisken, C.; Ayyannan, A.; Nguyen, C.; Heineman, A.; Reinhardt, F.; Tan, J.; Dey, S. K.; Dotto, G. P.; Weinberg, R. A. : IGF-2 is a mediator of prolactin-induced morphogenesis in the breast. *Dev. Cell* 3: 877-887, 2002. Note: Erratum: Dev. Cell 4: 283 only, 2003.

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