



Product Information Sheet

Polyclonal Anti- Cyclin D1

Catalogue No. PA1245

Lot No. 09G01

Ig type rabbit IgG

Size 100µg/vial

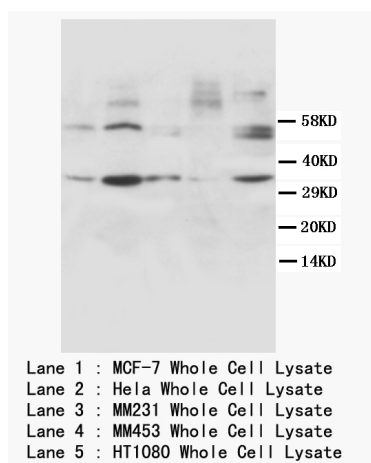
Specificity

Human, rat, mouse.

No cross reactivity with other proteins.

Recommended application

Western blot



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.

Purity

Immunogen affinity purified.

Application

	Concen- tration	Tested Species	Concluded Species	Antigen Retrieval
WB	1µg/ml	Hu, Rat	Ms	-
IHC-P	-	-	-	-
IHC-F	-	-	-	-
ICC	-	-	-	-

Other applications have not been tested.

Optimal dilutions should be determined by end user.

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg Thimerosal, 0.05mg NaN₃.

Reconstitution

0.2ml of distilled water will yield a concentration of 500µg/ml.

Storage

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for longer time.

To reorder contact us at:

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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

1. Fu, M.; Wang, C.; Li, Z.; Sakamaki, T.; Pestell, R. G. : Minireview: Cyclin D1: normal and abnormal functions. *Endocrinology* 145: 5439-5447, 2004.
2. Wang, C.; Pattabiraman, N.; Zhou, J. N.; Fu, M.; Sakamaki, T.; Albanese, C.; Li, Z.; Wu, K.; Hult, 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.