



Product Information Sheet

Monoclonal Anti-p27^{Kip1}

Catalogue No. MA1076

Lot No. 08A12

Clone: IMD-27

Ig type: mouse IgG1

Size: 100µg/vial

Specificity

Human, mouse, rat.

No cross reactivity with other proteins.

Recommended application

Western blot

Immunocytochemistry

Immunogen

recombinant rodent p27^{Kip1} protein.

Purification

Purified by the goat anti-mouse IgG affinity chromatography.

Application

Western blot

At 2-4µg/ml with the appropriate system to detect p27^{Kip1} in cells and tissues.

Immunocytochemistry

Suitable

Other applications have not been tested.

Optimal dilutions should be determined by end user.

Formulation

Lyophilized from 1.2% sodium acetate, with 2mg BSA and 0.01mg Na₃ as preservative.

Reconstitution

1.2% sodium acetate or neutral PBS. If 1ml of PBS is used, the antibody concentration will be 100µg/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

P27(kip1), also known as cyclin dependent kinase inhibitor 1B(CDKN1B), is a major target of AFX-like forkhead proteins. CDKN1B (p27) belongs to the Cip/Kip family and functions as an important cell cycle gatekeeper. Phosphorylation leads to the ubiquitination and degradation of CDKN1B. P27(kip1) mapped to 12p13. An increase in p27 causes proliferating cells to exit from the cell cycle, and a decrease in p27 is necessary for quiescent cells to resume division. Abnormally low amounts of p27 are associated with pathological states of excessive cell proliferation, especially cancers. Overexpression of p27Kip1 lengthens the G1 phase in a mouse model that targets inducible gene expression to central nervous system progenitor cells.

FOR RESEARCH USE ONLY. NOT FOR DIAGNOSTIC AND CLINICAL USE.

REFERENCE

1. Chang, B.; Zheng, S. L.; Isaacs, S. D.; Wiley, K. E.; Turner, A.; Li, G.; Walsh, P. C.; Meyers, D. A.; Isaacs, W. B.; Xu, J. : A polymorphism in the CDKN1B gene is associated with increased risk of hereditary prostate cancer. *Cancer Res.* 64: 1997-1999, 2004.
2. Malek, N. P.; Sundberg, H.; McGrew, S.; Nakayama, K.; Kyriakidis, T. R.; Roberts, J. M. : A mouse knock-in model exposes sequential proteolytic pathways that regulate p27(Kip1) in G1 and S phase. *Nature* 413: 323-327, 2001.
3. Mitsuhashi, T.; Aoki, Y.; Eksioglu, Y. Z.; Takahashi, T.; Bhide, P. G.; Reeves, S. A.; Caviness, V. S., Jr. : Overexpression of p27(Kip1) lengthens the G1 phase in a mouse model that targets inducible gene expression to central nervous system progenitor cells. *Proc. Nat. Acad. Sci.* 98: 6435-6440, 2001.