



Product Informatiion Sheet

Monoclonal Anti-p27κip1 (Sepharose Bead Conjugate)

Catalogue No. MA1076-S Immunogen

recombinant rodent p27Kip1 protein.

Purification

Clone: IMD-27 Purified by the goat anti-mouse IgG affinity chromatography.

Ig type: mouse IgG2a Formulation

50% slurry in PBS pH 7.2 with 0.01mg NaN3a3 preservative.

Size: 200µl

Storage

Store at 4°C for frequent use.

Human, mouse, rat. Description:

No cross reactivity with other This Antagene antibody is immobilized via covalent binding of primary

proteins. amino groups to N-hydroxysuccinimide (NHS)-activated sepharose

beads. It is useful for immunoprecipitation assays

Recommended application

Immunoprecipitation(IP)

BACKGROUND

Specificity

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.

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.