Product Information Sheet

# Monoclonal Anti-p27$^{Kip1}$ Magnetic Bead Conjugate

**Catalogue No.** MA1076-M

**Lot No.** 08A12

**Clone:** IMD-27

**Ig type:** mouse IgG1

**Size:** 200µl

**Specificity**

Human, mouse, rat.

No cross reactivity with other proteins.

**Recommended application**

*Immunoprecipitation(IP)*

**Immunogen**

recombinant rodent p27$^{Kip1}$ protein.

**Purification**

Purified by the goat anti-mouse IgG affinity chromatography.

**Formulation**

Each vial contains 1mg/ml Magnetic Bead in PBS, pH 7.2, 0.05mg $NaN_3$.

**Storage**

Store at 4˚C for frequent use.

**Description**

This Antagene antibody is immobilized by the covalent reaction of hydrazinonicotinamide-modified antibody with formylbenzamide-modified beads. It is useful for immunoprecipitation.

## 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.

## *REFERENCE*

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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.

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Contact: Antagene, Inc. | Tel: 1 (866) 964-2589 | Fax: 1 (888) 225-1868 | Email:Info@antageneinc.com