



Product Information Sheet

Monoclonal Anti-CDC6 (Sepharose Bead Conjugate)

Catalogue No. MA1019-S Immunogen

Lot No. 08A12 Recombinant human Cdc6

Clone: IMD-6 Purification

Ig type: mouse IgG1 Purified by the goat anti-mouse IgG affinity chromatography.

Size: 200µl Formulation

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

Human. Storage

No cross reactivity with other Store at 4°C for frequent use.

proteins. **Description:**

Recommended application 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

Immunoprecipitation(IP)

In yeasts, Cdc6 (Saccharomyces cerevisiae) and Cdc18 (Schizosaccharomyces pombe) associate with the origin recognition complex (ORC) proteins to render cells competent for DNA replication. Cdc6 is overexpressed in human cancers, where it has a critical regulatory role in addition to DNA replication. Yan et al. (1998) showed that Cdc6 is expressed selectively in proliferating but not quiescent mammalian cells, both in culture and within tissues in intact animals. During the transition from a growth-arrested to a proliferative state, transcription of mammalian Cdc6 is regulated by E2F proteins, as revealed by a functional analysis of the human Cdc6 promoter and by the ability of exogenously expressed E2F proteins to stimulate the endogenous Cdc6 gene. They conclude that expression of human Cdc6 is regulated in response to mitogenic signals though transcriptional control mechanisms involving E2F proteins, and that Cdc6 is required for initiation of DNA replication in mammalian cells.

REFERENCE

- 1. Gonzalez, S.; Klatt, P.; Delgado, S.; Conde, E.; Lopez-Rios, F.; Sanchez-Cespedes, M.; Mendez, J.; Antequera, F.; Serrano, M.: Oncogenic activity of Cdc6 through repression of the INK4/ARF locus. *Nature* 440: 702-706, 2006.
- 2. Yan, Z.; DeGregori, J.; Shohet, R.; Leone, G.; Stillman, B.; Nevins, J. R.; Williams, R. S.: Cdc6 is regulated by E2F and is essential for DNA replication in mammalian cells. *Proc. Nat. Acad. Sci.* 95: 3603-3608, 1998.