



Product Information Sheet

Monoclonal Anti-CDC6

Catalogue No. MA1019

Immunogen

Recombinant human Cdc6

Lot No. 08A12

Purification

Purified by the goat anti-mouse IgG affinity chromatography.

Clone: IMD-6

Ig type: mouse IgG1

Application

Western blot

Size: 100µg/vial

At 1-2µg/ml with the appropriate system to detect cdc6 in cells and tissues.

Specificity

Human.

Other applications have not been tested.

No cross reactivity with other proteins.

Optimal dilutions should be determined by end user.

Formulation

Lyophilized from 1.2% sodium acetate, with 2mg BSA and 0.01mg NaN₃ as preservative.

Recommended application

Western blot

Reconstitution

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

To reorder contact us at:

Antagene, Inc.

Toll Free: 1(866)964-2589

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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.

BACKGROUND

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.¹ 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 through transcriptional control mechanisms

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involving E2F proteins, and that Cdc6 is required for initiation of DNA replication in mammalian cells.²

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.