Product Information Sheet

Monoclonal Anti-p34^{cdc2}

Catalogue No. MA1077

Lot No. 08A12

Clone: IMD-34

Ig type: mouse IgG2a

Size: 100µg/vial

Specificity

Human, mouse, chicken.

No cross reactivity with other proteins.

Recommended application

Western blot

Immunohistochemistry(P)

Immunohistochemistry(F)

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Immunogen

C-terminal two-thirds of *Xenopus* p34^{cdc2} expressed in *E. coli*.

Purification

Purified by the goat anti-mouse IgG affinity chromatography.

Application

Western blot

At 0.5-1µg/ml with the appropriate system to detect p34^{cdc2} in cells and tissues.

Immunohistochemistry(P)

At 1-2µg/ml to detect p34^{cdc2} in formalin fixed and paraffin embedded tissues.

Immunohistochemistry(F)

At 1-2µg/ml to detect p34^{cdc2} in formalin or acetone fixed tissues.

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 NaN_3 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.

BACKGROUND

P34(cdc2), also known as cell division cycle(CDC2), or cyclin-dependent kinase 1(CDK1). CDC2 is a catalytic subunit of a protein kinase complex, called the M-phase promoting factor, that induces entry into mitosis and is universal among eukaryotes. In HeLa cells CDC2 is the most abundant phosphotyrosine-containing protein and its phosphotyrosine content is subject to cell cycle regulation. CDC2 gene is located on chromosome 10

REFERENCE

1 Draetta, G.; Piwnica-Worms, H.; Morrison, D.; Druker, B.; Roberts, T.; Beach, D. : Human CDC2 protein kinase is a major cell-cycle regulated tyrosine kinase substrate. *Nature* 336: 738-744, 1988.

2. Spurr, N. K.; Goodfellow, P. N.; Nurse, P.; Lee, M. : Assignment of the human homologue of the yeast cell cycle control gene CDC2 to chromosome 10. (Abstract) *Cytogenet. Cell Genet.* 46: 698, 1987.

3. Nazarenko, S. A.; Ostroverhova, N. V.; Spurr, N. K. : Regional assignment of the human cell cycle control gene CDC2 to chromosome 10q21 by in situ hybridization. *Hum. Genet.* 87: 621-622, 1991.