Thermo SCIENTIFIC

DATA SHEET
Rev 112602G

cdk1 / p34^{cdc2} Ab-1 (Clone A17.1.1)

Mouse Monoclonal Antibody

Cat. #MS-110-P0, -P1, or -P (0.1ml, 0.5ml, or 1.0ml at 200µg/ml) (Purified Ab with BSA and Azide)
Cat. #MS-110-P1ABX or -PABX (0.1ml or 0.2ml at 1.0mg/ml) (Purified Ab without BSA and Azide)
Cat. #MS-110-B0, -B1, or -B (0.1ml, 0.5ml, or 1.0ml at 200µg/ml) (Biotin-labeled Ab with BSA and Azide)
Cat. #MS-110-R7 (7.0ml) (Ready-to-Use for Immunohistochemical Staining)
Cat. #MS-110-PCS (5 Slides) (Positive Control for Histology)
Cat. #MS-110-PCL (0.1ml) (Positive Control for Western Blot)

Description: p34^{cdc2}(a catalytic subunit of Maturation Promoting Factor) plays a crucial role during cell division and is most active during mitosis. It is a serine/threonine kinase, which is activated by cyclin, by dephosphorylation of tyrosine residues. p34^{cdc2} is inactivated by a tyrosine kinase.

Comments: Ab-1 supports the kinase activity. It inhibits the activation of p34^{cdc2} kinase by cyclins.

Mol. Wt. of Antigen: 34kDa

Epitope: aa220-227

Species Reactivity: Human, Mouse, Rat, Guinea pig, Woodchuck, *Xenopus*, and Chicken.

Clone Designation: A17.1.1

Ig Isotype: IgG_{2a}

Immunogen: C-Terminal 2/3rds of *Xenopus* cdc2 expressed in *E.coli*

Applications and Suggested Dilutions:

- Inhibits activation of p34^{cdc2} kinase by cyclins
- Immunofluorescence
- Immunoprecipitation (Native and denatured) (Use Protein A) (Ab 2µg/mg protein lysate)
- Kinase Assay
- Western Blotting (Ab 1-2µg/ml for 2hrs at RT)
- Immunohistology (Formalin/paraffin) (Ab 2-4µg/ml for 30 min at RT)

* [Staining of formalin-fixed tissues REQUIRES boiling tissue sections in 10mM citrate buffer, pH 6.0, (***NEOMARKERS'*** Cat. #AP-9003), for 10-20 min followed by cooling at RT for 20 min.]

The optimal dilution for a specific application should be determined by the investigator.

Positive Control: HeLa, MAD109, PC12 or NIH-3T3 cells. Tonsil or lymph node.

Cellular Localization: Cytoplasmic

Supplied As: 200µg/ml of antibody purified from ascites fluid by Protein A chromatography. Prepared in 10mM PBS, pH 7.4, with 0.2% BSA and 0.09% sodium azide. Also available without BSA and azide at 1mg/ml. Or Prediluted antibody which is ready-to-use for staining of formalin-fixed, paraffin-embedded tissues.

Storage and Stability: Ab with sodium azide is stable for 24 months when stored at 2-8°C. Antibody WITHOUT sodium azide is stable for 36 months when stored at below 0°C.

Key References:

1. Histopathology, 1994, 24:335-40.
2. Kobayashi H, et al. (1991) Cold Spring Harbour Symp on Quant Biol 56:437-447.
3. Mol Biol Cell (1992) 3:1279-1294.
4. J Path (1996) 1788:422-428.

Limitations and Warranty:

Our products are intended FOR RESEARCH USE ONLY and are not approved for clinical diagnosis, drug use or therapeutic procedures. No products are to be construed as a recommendation for use in violation of any patents. We make no representations, warranties or assurances as to the accuracy or completeness of information provided on our data sheets and website. Our warranty is limited to the actual price paid for the product. NeoMarkers is not liable for any property damage, personal injury, time or effort or economic loss caused by our products.

Material Safety Data:

This product is not licensed or approved for administration to humans or to animals other than the experimental animals. Standard Laboratory Practices should be followed when handling this material. The chemical, physical, and toxicological properties of this material have not been thoroughly investigated. Appropriate measures should be taken to avoid skin and eye contact, inhalation, and ingestion. The material contains 0.09% sodium azide as a preservative. Although the quantity of azide is very small, appropriate care should be taken when handling this material as indicated above. The National Institute of Occupational Safety and Health has issued a bulletin citing the potential explosion hazard due to the reaction of sodium azide with copper, lead, brass, or solder in the plumbing systems. Sodium azide forms hydrazoic acid in acidic conditions and should be discarded in a large volume of running water to avoid deposits forming in metal drainage pipes.

For Research Use Only

Additional Key References:

Thermo Fisher Scientific
Anatomical Pathology
46360 Fremont Blvd.
Fremont, CA 94538, USA
Tel: 1-510-771-1560
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Thermo Fisher Scientific
Anatomical Pathology
93-96 Chadwick Road, Astmoor
Runcorn, Cheshire WA7 1PR, UK
Tel: 44-1928-562600
Fax: 44-1928-562627
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Thermo Fisher Scientific
Anatomical Pathology
46360 Fremont Blvd.
Fremont, CA 94538, USA
Tel: 1-510-771-1560
Fax: 1-510-771-1570
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