

# Produktinformation



Forschungsprodukte & Biochemikalien
Zellkultur & Verbrauchsmaterial
Diagnostik & molekulare Diagnostik
Laborgeräte & Service

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Lieferung & Zahlungsart siehe unsere Liefer- und Versandbedingungen

# Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

# SZABO-SCANDIC HandelsgmbH

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p34 cdc-2 nuclear protein. Mouse Monoclonal Antibody

#### BACKGROUND

p34(Cdc2) kinase is a an essential nuclear protein for mitosis in human cells. During the prophase/metaphase transition the inactive phosphorylated form of p34(cdc2) is dephosphorylated to make the active form of the protein. This dephosphorylation is performed by the p80 (cdc25) dual-specificity phosphatase. The regulatory subunit of p34(cdc2) is cyclin B, a 47-52 kDa protein. The p34(cdc2) protein is the catalytic subunit of the M phase-promoting factor (MPF) which is intracellular factor responsible for entry into M phase. Three mechanisms are responsible for the activitation of MPF at the onset of mitosis: binding of p34(cdc2) to cyclin B, a series of phosphorylation/dephosphorylation events on the two subunits and translocation of the complex to the nucleus or microtubules.

ORDERING INFORMATION CATALOG NUMBER X1236M Size 100 μg Form Unconjugated Host/CLONE Mouse Clone POH-1

FORMULATION Provided as solution in phosphate buffered saline with 0.08% sodium azide

**CONCENTRATION** See vial for concentration

ISOTYPE

IgG2a **APPLICATIONS** Immunohistochemistry (Paraffin Sections), Immunocytochemistry,

Western Blot, Immunoprecipitation
SPECIES REACTIVITY

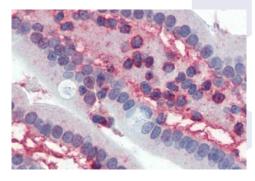
Human, Bovine, Xenopus, Mouse, Rat

Accession Number Human P06493

#### IMMUNOGEN

Hybridoma produced by the fusion of splenocytes from BALB/c mice immunized with recombinant human p34.cdc2 fusion protein and mouse myeloma cells.

Immunohistochemical staining of formalin-fixed paraffin-embedded human small intestine tissue after heat induced antigen retrival. Antibody used at 10  $\mu$ g/ml.



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For research use only. Not for use in human diagnostics or therapeutics.

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Page 1 of 2 Cat. No. X1236M

### POSITIVE CONTROL/TISSUE EXPRESSION

HeLa cell lysate



### COMMENTS

Detects three bands within the 34 kDa region corresponding to p34 and its cleavage products. Can also be used for IHC on paraffin-embedded tissue (10  $\mu$ g/ml) as well as immunocytochemistry and immunoprecipitation. Optimal concentration should be evaluated by serial dilutions.

## PURIFICATION

Protein A/G Chromatography

#### SHIP CONDITIONS

Ship at ambient temperature, freeze upon arrival

#### STORAGE CUSTOMER

Product should be stored at -20°C. Aliquot to avoid freeze/thaw cycles

#### STABILITY

Products are stable for one year from purchase when stored properly

#### REFERENCES

1. Lukas, J., et al. Distinct forms of human CDC2 identified by novel monoclonal antibodies. Eur. J. Biochem. 1992, 207, 169-176

2. Borgne, A. & Meijer, L. Sequential dephosphorylation of p34(cdc2) on Thr-14 and Tyr-15 at the prophase/metaphase transition. J. Biol. Chem. 1996, 271, 27847-27854

3. Kao, G.D., et al. p34(Cdc2) kinase activity is excluded from the nucleus during the radiation-induced  $G_2$  arrest in HeLa cells. J. Biol. Chem. 1999, 274, 34779-34784

## **PRODUCT SPECIFIC REFERENCES**