**BACKGROUND**

In vertebrates, as in yeast, multiple cyclins have been identified, including a total of eight such regulatory proteins in mammals. In contrast to the situation in yeast, the Cdc2 p34 kinase is not the only catalytic subunit identified in vertebrates that can interact with cyclins. While Cdc2 p34 is essential for the G2 to M transition in vertebrate cells, a second Cdc2-related kinase has also been implicated in cell cycle control. This protein, designated cyclin-dependent kinase 2 (Cdk2)p33, also binds to cyclins and its kinase activity is temporally regulated during the cell cycle. Several additional Cdc2 p34-related cyclin dependent kinases have been identified. These include Cdk3-Cdk8, PCTAIRE-1-3 and KIALRE.

**CHROMOSOMAL LOCATION**

Genetic locus: CDK1 (human) mapping to 10q21.2; Cdk1 (mouse) mapping to 10 B5.3.

**SOURCE**

Cdc2 p34 (C-19) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping at the C-terminus of Cdc2 p34 of human origin.

**PRODUCT**

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-954 P , (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

**APPLICATIONS**

Cdc2 p34 (C-19) is recommended for detection of Cdc2 p34 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Cdc2 p34 (C-19) is also recommended for detection of Cdc2 p34 in additional species, including equine, canine, bovine and porcine.


Molecular Weight of Cdc2 p34: 34 kDa.

Positive Controls: IB4 whole cell lysate: sc-364780, HeLa nuclear extract: sc-2120 or NAMALWA cell lysate: sc-2234.

**STORAGE**

Store at 4°C. **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**SELECT PRODUCT CITATIONS**


**DATA**

- Cdc2 p34 (C-19): sc-954. Western blot analysis of Cdc2 p34 expression in IB4 whole cell lysate.
- Cdc2 p34 (C-19): sc-954. Immunoperoxidase staining of formalin-fixed, paraffin-embedded normal human skin (A). Immunofluorescence staining of methanol-fixed HeLa cells showing nuclear localization (B).

**RESEARCH USE**

For research use only, not for use in diagnostic procedures.