

Skp1 p19 (52): sc-136301

BACKGROUND

The critical role that the family of regulatory proteins known as cyclins plays in eukaryotic cell cycle regulation is well established. The best characterized cyclin complex is the mitotic cyclin B/Cdc2 p34 kinase, the active component of MPF (maturation promoting factor). Cyclin A accumulates prior to cyclin B in the cell cycle, appears to be involved in control of S phase and has been shown to associate with cyclin dependent kinase-2 (Cdk2). In addition, cyclin A has been implicated in cell transformation and is found in complexes with E1A, transcription factors DP-1 and E2F and retinoblastoma protein p110. Two cyclin A-Cdk2 complex binding proteins, Skp1 p19 and Skp2 p45, have been described. Although the Skps (S phase kinase-associated proteins) associate with the active cyclin A-Cdk2 complex, they do not exhibit any regulatory effects on the complex. Abolition of Skp2 p45 function by either microinjection of anti-p45 antibodies or addition of antisense oligonucleotides prevents entry into S phase of both normal and transformed cells.

REFERENCES

1. Draetta, G., et al. 1989. Cdc2 protein kinase is complexed with both cyclin A and B: evidence for proteolytic inactivation of MPF. *Cell* 56: 829-838.
2. Giordano, A., et al. 1989. A 60 kDa Cdc2-associated polypeptide complexes with the E1A proteins in adenovirus-infected cells. *Cell* 58: 981-990.
3. Wang, J., et al. 1990. Hepatitis B virus integration in a cyclin A gene in a hepatocellular carcinoma. *Nature* 343: 555-557.
4. Pines, J., et al. 1990. Human cyclin A is adenovirus E1A-associated protein p60 and behaves differently from cyclin B. *Nature* 346: 760-763.
5. Bandara, L.R., et al. 1991. Cyclin A and the retinoblastoma gene product complex with a common transcription factor. *Nature* 352: 249-251.
6. Williams, R.T., et al. 1992. Co-purification of p34 Cdc2/p58 cyclin A proline-directed protein kinase and the retinoblastoma tumor susceptibility gene product: interaction of an oncogenic serine/threonine protein kinase with a tumor-suppressor protein. *Oncogene* 7: 423-432.
7. Lees, E., et al. 1992. Cyclin E/Cdk2 and cyclin A/Cdk2 kinases associate with p107 and E2F in a temporally distinct manner. *Genes Dev.* 6: 1874-1885.

CHROMOSOMAL LOCATION

Genetic locus: SKP1 (human) mapping to 5q31.1; Skp1a (mouse) mapping to 11 B1.3.

SOURCE

Skp1 p19 (52) is a mouse monoclonal antibody raised against amino acids 4-158 of Skp1 p19 of human origin.

PRODUCT

Each vial contains 50 µg IgG₁ in 0.5 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

RESEARCH USE

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

APPLICATIONS

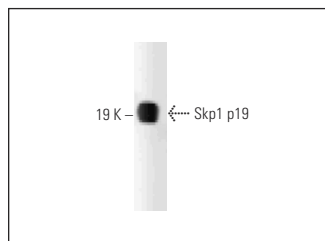
Skp1 p19 (52) is recommended for detection of Skp1 p19 of mouse, rat, human and canine origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for Skp1 p19 siRNA (h): sc-29482, Skp1 p19 siRNA (m): sc-36498, Skp1 p19 shRNA Plasmid (h): sc-29482-SH, Skp1 p19 shRNA Plasmid (m): sc-36498-SH, Skp1 p19 shRNA (h) Lentiviral Particles: sc-29482-V and Skp1 p19 shRNA (m) Lentiviral Particles: sc-36498-V.

Molecular Weight of Skp1 p19: 19 kDa.

Positive Controls: mouse brain extract: sc-2253, A-431 whole cell lysate: sc-2201 or HeLa nuclear extract: sc-2120.

DATA



Skp1 p19 (52): sc-136301. Western blot analysis of Skp1 p19 expression in A-431 whole cell lysate.

STORAGE

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

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.