

## p57 (M-20): sc-1039



The Power to Question

## BACKGROUND

Cell cycle progression is regulated by a series of cyclin-dependent kinases that consist of catalytic subunits designated Cdk and activating subunits designated cyclins. Orderly progression through the cell cycle requires the activation and inactivation of different cyclin-Cdks at appropriate times. A series of proteins has been described that function as mitotic inhibitors. These include p21, the levels of which are elevated upon DNA damage in G<sub>1</sub> in a p53-dependent manner, p16 and p16-related inhibitors, designated p15, p18 and p19. A p21-related protein, p27, has been described as a negative regulator of G<sub>1</sub> progression and has been speculated to function as a possible mediator of TGF  $\beta$ -induced G<sub>1</sub> arrest. A member of the p21/p27 family of mitotic inhibitory proteins has been designated p57. p57 is a potent, tight-binding cyclin-dependent inhibitor of several G<sub>1</sub> cyclin/Cdk complexes. Over-expression of p57 arrests cells in G<sub>1</sub>. Unlike p21, p57 is not regulated by p53.

## CHROMOSOMAL LOCATION

Genetic locus: CDKN1C (human) mapping to 11p15.4; Cdkn1c (mouse) mapping to 7 F5.

## SOURCE

p57 (M-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of p57 of mouse origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-1039 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

p57 (M-20) is recommended for detection of p57 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for p57 siRNA (h): sc-35751, p57 siRNA (m): sc-37621, p57 shRNA Plasmid (h): sc-35751-SH, p57 shRNA Plasmid (m): sc-37621-SH, p57 shRNA (h) Lentiviral Particles: sc-35751-V and p57 shRNA (m) Lentiviral Particles: sc-37621-V.

Molecular Weight of p57: 57 kDa.

Positive Controls: A673 nuclear extract: sc-2128, Jurkat nuclear extract: sc-2132 or HeLa nuclear extract: sc-2120.

## STORAGE

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

## RESEARCH USE

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

## SELECT PRODUCT CITATIONS

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