## SANTA CRUZ BIOTECHNOLOGY, INC.

# CDKN2AIP (N-13): sc-161477



### BACKGROUND

Cell cycle progression is controlled in part by a family of cyclin proteins and cyclin dependent kinases (Cdks). CDKN2AIP (CDKN2A-interacting protein), also known as CARF, is a 580 amino acid protein that activates p53 via p14 ARF (alternate reading frame)-dependent and independent pathways.

CDKN2AIP-dependent activation of p53, a protein that up-regulates growth arrest and apoptosis-related genes in response to stress signals, leads to an enhancement of p53 function. Expression levels of CDKN2AIP and p53 show an inverse relationship that is caused by a negative-feedback control via a proteasome-mediated degradation pathway. CDKN2AIP is expressed ubiquitously across tissue samples and, along with p14 ARF, is localized to the per-inucleolar region within the nucleus. Through direct interaction with MDM2, CDKN2AIP functions as a repressor of MDM2 transcription and undergoes degradation by the MDM2-dependent proteasome pathway. CDKN2AIP contains one DRBM (double-stranded RNA-binding) domain, suggesting a possible role in post-transcriptional gene regulation.

#### CHROMOSOMAL LOCATION

Genetic locus: CDKN2AIP (human) mapping to 4q35.1; Cdkn2aip (mouse) mapping to 8 B1.1.

#### SOURCE

CDKN2AIP (N-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of CDKN2AIP of human origin.

#### PRODUCT

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

Blocking peptide available for competition studies, sc-161477 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### **APPLICATIONS**

CDKN2AIP (N-13) is recommended for detection of CDKN2AIP of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], 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).

CDKN2AIP (N-13) is also recommended for detection of CDKN2AIP in additional species, including bovine and porcine.

Suitable for use as control antibody for CDKN2AIP siRNA (h): sc-88879, CDKN2AIP siRNA (m): sc-142231, CDKN2AIP shRNA Plasmid (h): sc-88879-SH, CDKN2AIP shRNA Plasmid (m): sc-142231-SH, CDKN2AIP shRNA (h) Lentiviral Particles: sc-88879-V and CDKN2AIP shRNA (m) Lentiviral Particles: sc-142231-V.

Molecular Weight of CDKN2AIP: 61 kDa.

Positive Controls: HeLa nuclear extract: sc-2120 or NIH/3T3 whole cell lysate: sc-2210.

#### **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz<sup>™</sup> Mounting Medium: sc-24941.

#### DATA



CDKN2AIP (N-13): sc-161477. Western blot analysis of CDKN2AIP expression in NIH/3T3 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.

#### **RESEARCH USE**

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

#### PROTOCOLS

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

## MONOS Satisfation Guaranteed

Try **CDKN2AIP (18.7): sc-81841**, our highly recommended monoclonal alternative to CDKN2AIP (N-13).