## SANTA CRUZ BIOTECHNOLOGY, INC.

# APIP (G-14): sc-66319



#### BACKGROUND

APIP (Apaf-1-interacting protein), also known as APIP2, is a member of the aldolase class II family and has a highly conserved C-terminal from *C. elegans* to humans. It is ubiquitously expressed, with high expression levels in heart, kidney and skeletal muscle. Alternative splicing produces two isoforms of APIP. Isoform 1 is the full length, 242 amino acid protein; isoform 2 is missing residues 1-38 and contains a distinct sequence for amino acids 39-53. APIP plays an important role in preventing muscle ischemic damage. It suppresses hypoxia-induced cell death by inducing the activation of Akt and ERK 1/2, which are responsible for inhibition of caspase-9 via phosphorylation, and competing with caspase-9 to bind the caspase recruitment domain (CARD) of Apaf-1. Through these mechanisms, APIP negatively regulates the activation of caspase-9 and Apaf-1-mediated cell death.

## CHROMOSOMAL LOCATION

Genetic locus: APIP (human) mapping to 11p13; Apip (mouse) mapping to 2 E2.

### SOURCE

APIP (G-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of APIP of human 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-66319 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### **STORAGE**

Store at 4° C, \*\*D0 NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## **APPLICATIONS**

APIP (G-14) is recommended for detection of APAF1-interacting protein of mouse, rat and human 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)], 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).

APIP (G-14) is also recommended for detection of APAF1-interacting protein in additional species, including equine, canine and avian.

Suitable for use as control antibody for APIP siRNA (h): sc-61976, APIP siRNA (m): sc-61977, APIP shRNA Plasmid (h): sc-61976-SH, APIP shRNA Plasmid (m): sc-61977-SH, APIP shRNA (h) Lentiviral Particles: sc-61976-V and APIP shRNA (m) Lentiviral Particles: sc-61977-V.

Molecular Weight of APIP: 27 kDa.

Positive Controls: APIP (h): 293 Lysate: sc-111191, HeLa whole cell lysate: sc-2200 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



APIP (G-14): sc-66319. Western blot analysis of APIP expression in non-transfected: sc-110760 ( $\bf A$ ) and human APIP transfected: sc-111191 ( $\bf B$ ) 293 whole cell lysates.

#### **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 **APIP (D-8): sc-390721** or **APIP (C-9): sc-376666**, our highly recommended monoclonal alternatives to APIP (G-14).