SANTA CRUZ BIOTECHNOLOGY, INC.

RAP1 (V-16): sc-13653

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

RAP1, also known as TERF2IP (telomeric repeat-binding factor 2-interacting protein 1) or DRIP5, is a 399 amino acid nuclear and cytoplasmic protein that contains one BRCT domain and one Myb-like domain. Belonging to the RAP1 family, RAP1 acts as both a regulator of telomere function and a regulator of transcription. While it does not bind DNA directly, RAP1 is recruited to telomeric double-stranded 5'-TTAGGG-3' repeats via its interaction with TRF2. RAP1 is required to negatively regulate telomere recombination and is essential for repressing homology-directed repair (HDR), which can affect telomere length. The gene that encodes RAP1 maps to human chromosome 16q23.1 and mouse chromosome 8 E1.

CHROMOSOMAL LOCATION

Genetic locus: TERF2IP (human) mapping to 16q23.1; Terf2ip (mouse) mapping to 8 E1.

SOURCE

RAP1 (V-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of RAP1 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-13653 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

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.

APPLICATIONS

RAP1 (V-16) is recommended for detection of RAP1 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).

RAP1 (V-16) is also recommended for detection of RAP1 in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for RAP1 siRNA (h): sc-38554, RAP1 siRNA (m): sc-38555, RAP1 shRNA Plasmid (h): sc-38554-SH, RAP1 shRNA Plasmid (m): sc-38555-SH, RAP1 shRNA (h) Lentiviral Particles: sc-38554-V and RAP1 shRNA (m) Lentiviral Particles: sc-38555-V.

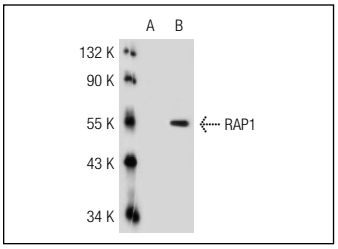
Molecular Weight of RAP1: 44 kDa.

Positive Controls: RAP1 (m): 293T Lysate: sc-122972, HeLa nuclear extract: sc-2120 or HL-60 nuclear extract: sc-2147.

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™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ 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™ Mounting Medium: sc-24941.

DATA



RAP1 (V-16): sc-13653. Western blot analysis of RAP1 expression in non-transfected: sc-117752 (**A**) and mouse RAP1 transfected: sc-122972 (**B**) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

1. Sebzda, E., et al. 2002. RAP1A positively regulates T cells via integrin activation rather than inhibiting lymphocyte signaling. Nat. Immunol. 3: 251-258.

PROTOCOLS

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