

RAP1 (N-20): sc-13652

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 (N-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at 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-13652 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.

APPLICATIONS

RAP1 (N-20) 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 (N-20) 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 siRNA (r): sc-270420, RAP1 shRNA Plasmid (h): sc-38554-SH, RAP1 shRNA Plasmid (m): sc-38555-SH, RAP1 shRNA Plasmid (r): sc-270420-SH, RAP1 shRNA (h) Lentiviral Particles: sc-38554-V, RAP1 shRNA (m) Lentiviral Particles: sc-38555-V and RAP1 shRNA (r) Lentiviral Particles: sc-270420-V.

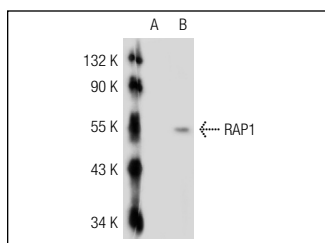
Molecular Weight of RAP1: 44 kDa.

Positive Controls: RAP1 (m): 293T Lysate: sc-122972, C32 nuclear extract: sc-2136 or A-431 nuclear extract: sc-2122.

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 (N-20): sc-13652. 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

- Ory, B., et al. 2008. Farnesyl diphosphate synthase is involved in the resistance to zoledronic acid of osteosarcoma cells. *J. Cell. Mol. Med.* 12: 928-941.

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
Satisfaction
Guaranteed

Try **RAP1 (4C8/1): sc-53434** or **RAP1 (5G7): sc-47695**, our highly recommended monoclonal alternatives to RAP1 (N-20).