

RNGTT (N-13): sc-138054

BACKGROUND

RNGTT (RNA guanylyltransferase and 5'-phosphatase), also known as HCE, HCE1, hCAP or CAP1A, is a 597 amino acid protein that localizes to the nucleus and exists as 4 alternatively spliced isoforms. Expressed in kidney, lung, heart, brain, liver, testis, skin and muscle, RNGTT acts as a bifunctional mRNA-capping enzyme that exhibits RNA 5'-triphosphatase activity at its N-terminus and mRNA guanylyltransferase activity at its C-terminus. Via its catalytic activity, RNGTT facilitates the first two steps of mRNA cap formation, naming the removal of a γ -phosphate from the end of nascent mRNA and the subsequent transfer of the phospho residue to the 5'-diphosphate terminus. The gene encoding RNGTT maps to human chromosome 6, which contains 170 million base pairs and comprises nearly 6% of the human genome.

CHROMOSOMAL LOCATION

Genetic locus: RNGTT (human) mapping to 6q15; Rngtt (mouse) mapping to 4 A5.

SOURCE

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

PRODUCT

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

Blocking peptide available for competition studies, sc-138054 P, (100 μ g 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

RNGTT (N-13) is recommended for detection of RNGTT of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ 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).

RNGTT (N-13) is also recommended for detection of RNGTT in additional species, including equine, canine, bovine and avian.

Suitable for use as control antibody for RNGTT siRNA (h): sc-95119, RNGTT siRNA (m): sc-153055, RNGTT shRNA Plasmid (h): sc-95119-SH, RNGTT shRNA Plasmid (m): sc-153055-SH, RNGTT shRNA (h) Lentiviral Particles: sc-95119-V and RNGTT shRNA (m) Lentiviral Particles: sc-153055-V.

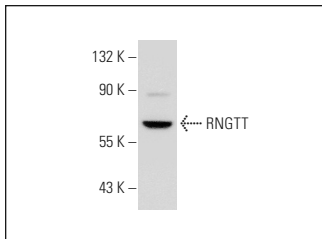
Molecular Weight of RNGTT: 69 kDa.

Positive Controls: Jurkat nuclear extract: sc-2132, IMR-32 nuclear extract: sc-2148 or SH-SY5Y nuclear extract: sc-364820.

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



RNGTT (N-13): sc-138054. Western blot analysis of RNGTT expression in SH-SY5Y nuclear extract.

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 **RNGTT (D-3): sc-377464** or **RNGTT (H-3): sc-514128**, our highly recommended monoclonal alternatives to RNGTT (N-13).