

RNF24 (N-19): sc-86836

BACKGROUND

The RING-type zinc finger motif is present in a number of viral and eukaryotic proteins and is made of a conserved cysteine-rich domain that is able to bind two zinc atoms. Proteins that contain this conserved domain are generally involved in the ubiquitination pathway of protein degradation. RNF24 (ring finger protein 24), also known as Goliath-like protein (C3CH4 type) or G1L, is a single-pass membrane protein found in the Golgi apparatus, consisting of 148 amino acids. RNF24 causes intracellular retention of TRPCs, regulates insertion of TRPCs into the plasma membrane and interacts with TRPC1, TRPC3, TRPC4, TRPC5, TRPC6 and TRPC7. The RNF24 protein shares similarity with *Drosophila* Goliath protein and thus, may function as a transcription factor. Multiple transcript variants encoding different isoforms have been found for the RNF24 gene, which maps to human chromosome 20p13.

REFERENCES

1. Borden, K.L. and Freemont, P.S. 1996. The RING finger domain: a recent example of a sequence-structure family. *Curr. Opin. Struct. Biol.* 6: 395-401.
2. Lorick, K.L., et al. 1999. RING fingers mediate ubiquitin-conjugating enzyme (E2)-dependent ubiquitination. *Proc. Natl. Acad. Sci. USA* 96: 11364-11369.
3. Lussier, M.P., et al. 2008. RNF24, a new TRPC interacting protein, causes the intracellular retention of TRPC. *Cell Calcium* 43: 432-443.
4. Online Mendelian Inheritance in Man, OMIM™. 2008. Johns Hopkins University, Baltimore, MD. MIM Number: 612489. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
5. Cheong, S.C., et al. 2009. Gene expression in human oral squamous cell carcinoma is influenced by risk factor exposure. *Oral Oncol.* 45: 712-719.

CHROMOSOMAL LOCATION

Genetic locus: RNF24 (human) mapping to 20p13; Rnf24 (mouse) mapping to 2 F1.

SOURCE

RNF24 (N-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of RNF24 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-86836 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-86836 X, 100 µg/0.1 ml.

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

RNF24 (N-19) is recommended for detection of RNF24 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); non cross-reactive with other RNF family members.

RNF24 (N-19) is also recommended for detection of RNF24 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for RNF24 siRNA (h): sc-76422, RNF24 siRNA (m): sc-153043, RNF24 shRNA Plasmid (h): sc-76422-SH, RNF24 shRNA Plasmid (m): sc-153043-SH, RNF24 shRNA (h) Lentiviral Particles: sc-76422-V and RNF24 shRNA (m) Lentiviral Particles: sc-153043-V.

RNF24 (N-19) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

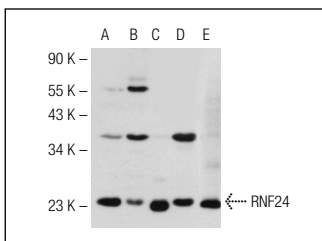
Molecular Weight of RNF24: 17 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, A-431 whole cell lysate: sc-2201 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™ 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



RNF24 (N-19): sc-86836. Western blot analysis of RNF24 expression in HeLa (A), A-431 (B), NIH/3T3 (C) and SW480 (D) nuclear extracts and mouse brain tissue extract (E).

PROTOCOLS

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