SANTA CRUZ BIOTECHNOLOGY, INC.

RNF138 (C-17): sc-85074



The Power to Question

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. RNF138 (RING finger protein 138), also known as HSD4 or NARF, is a 245 amino acid protein that contains one RING-type zinc finger and functions as an E3 ubiquitin-protein ligase, playing an important role in protein ubiquitination. Expressed as multiple alternatively spliced isoforms, RNF138 interacts with NIk and is thought to act as a negative regulator of the Wnt/ β -catenin-mediated signaling pathway. RNF138 may be auto-ubiquitinated and is subject to post-translational phosphorylation, probably by ATM or ATR.

REFERENCES

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- Borden, K.L., et al. 1996. The RING finger domain: a recent example of a sequence-structure family. Curr. Opin. Struct. Biol. 6: 395-401.
- 3. Saurin, A.J., et al. 1996. Does this have a familiar RING? Trends Biochem. Sci. 21: 208-214.
- 4. Lorick, K.L., et al. 1999. RING fingers mediate ubiquitin-conjugating enzyme (E2)-dependent ubiquitination. Proc. Natl. Acad. Sci. USA 96: 11364-11369.
- 5. Andersen, K.M., et al. 2005. Ubiquitin-binding proteins: similar, but different. Essays Biochem. 41: 49-67.
- 6. Hurley, J.H., et al. 2006. Ubiquitin-binding domains. Biochem. J. 399: 361-372.
- Yamada, M., et al. 2006. NARF, an nemo-like kinase (NLK)-associated ring finger protein regulates the ubiquitylation and degradation of T cell factor/ lymphoid enhancer factor (TCF/LEF). J. Biol. Chem. 281: 20749-20760.

CHROMOSOMAL LOCATION

Genetic locus: RNF138 (human) mapping to 18q12.1.

SOURCE

RNF138 (C-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of RNF138 of human origin.

STORAGE

Store at 4° C, **D0 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.

PROTOCOLS

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

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-85074 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

RNF138 (C-17) is recommended for detection of RNF138 of human and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

RNF138 (C-17) is also recommended for detection of RNF138 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for RNF138 siRNA (h): sc-75876, RNF138 shRNA Plasmid (h): sc-75876-SH and RNF138 shRNA (h) Lentiviral Particles: sc-75876-V.

Molecular Weight of RNF138: 28 kDa.

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) Immunofluo-rescence: 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.