## SANTA CRUZ BIOTECHNOLOGY, INC.

# RNF13 (N-12): sc-99614



## 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. RNF13 (ring finger protein 13), also known as RZF, FLJ93817 or MGC13689, is a novel 381 amino acid E3 ubiquitin ligase that localizes to the nucleus. RNF13 contains one RING-type zinc finger and the C-terminal portion of RNF13 has the ability to mediate ubiquitination. Recent studies suggest that RNF13 may be involved in the development of pancreatic cancer via ubiquitin-mediated modification of proteins. The gene encoding RNF13 maps to human chromsome 3q25.1, and a pseudogene (which is also located on chromosome 3), exists for this gene.

## REFERENCES

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- Tranque, P., et al. 1996. Identification and characterization of a RING zinc finger gene (C-RZF) expressed in chicken embryo cells. Proc. Natl. Acad. Sci. USA 93: 3105-3109.
- Lorick, K.L., et al. 1999. RING fingers mediate ubiquitin-conjugating enzyme (E2)-dependent ubiquitination. Proc. Natl. Acad. Sci. USA 96: 11364-11369.
- Online Mendelian Inheritance in Man, OMIM<sup>™</sup>. 2005. Johns Hopkins University, Baltimore, MD. MIM Number: 609247. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
- Wesselkamper, S.C., et al. 2006. The role of metallothionein in the pathogenesis of acute lung injury. Am. J. Respir. Cell Mol. Biol. 34: 73-82.
- Zhang, Q., et al. 2009. RNF13: a novel RING-type ubiquitin ligase overexpressed in pancreatic cancer. Cell Res. 19: 348-357.
- Bocock, J.P., et al. 2009. The PA-TM-RING protein RING finger protein 13 is an endosomal integral membrane E3 ubiquitin ligase whose RING finger domain is released to the cytoplasm by proteolysis. FEBS J. 276: 1860-1877.

#### CHROMOSOMAL LOCATION

Genetic locus: RNF13 (human) mapping to 3q25.1; Rnf13 (mouse) mapping to 3 D.

## SOURCE

RNF13 (N-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of RNF13 of human origin.

## PRODUCT

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-99614 P, (100  $\mu$ g 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-99614 X, 100  $\mu g/0.1$  ml.

## APPLICATIONS

RNF13 (N-12) is recommended for detection of RNF13 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ 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); non cross-reactive with other RNF family members.

RNF13 (N-12) is also recommended for detection of RNF13 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for RNF13 siRNA (h): sc-78079, RNF13 siRNA (m): sc-153009, RNF13 shRNA Plasmid (h): sc-78079-SH, RNF13 shRNA Plasmid (m): sc-153009-SH, RNF13 shRNA (h) Lentiviral Particles: sc-78079-V and RNF13 shRNA (m) Lentiviral Particles: sc-153009-V.

RNF13 (N-12) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

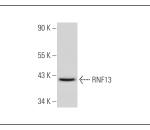
Molecular Weight of RNF13: 42 kDa.

Positive Controls: PANC-1 whole cell lysate: sc-364380.

## **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



RNF13 (N-12): sc-99614. Western blot analysis of RNF13 expression in PANC-1 whole cell lysate.

## **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.