

# RNF219 (T-17): sc-84039

## 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. RNF219 (ring finger protein 219) is a 726 amino acid protein that contains one RING-type zinc finger through which it may play a role in transcriptional regulation and protein degradation events. In response to DNA damage, RNF219 is subject to phosphorylation, probably by ATM or ATR. The gene encoding RNF219 maps to human chromosome 13, which houses over 400 genes, such as BRCA2 and RB1, and comprises nearly 4% of the human genome. Trisomy 13, also known as Patau syndrome, is deadly and the few who survive past one year suffer from permanent neurologic defects, difficulty eating and vulnerability to serious respiratory infections.

## REFERENCES

1. Freemont, P.S. 1993. The RING finger. A novel protein sequence motif related to the zinc finger. *Ann. N.Y. Acad. Sci.* 684: 174-192.
2. 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. Lorick, K.L., et al. 1999. RING fingers mediate ubiquitin-conjugating enzyme (E2)-dependent ubiquitination. *Proc. Natl. Acad. Sci. USA* 96: 11364-11369.
4. Bugge, M., et al. 2007. Non-disjunction of chromosome 13. *Hum. Mol. Genet.* 16: 2004-2010.
5. Hsu, H.F., et al. 2007. Variable expressivity in Patau syndrome is not all related to trisomy 13 mosaicism. *Am. J. Med. Genet. A* 143: 1739-1748.
6. Hall, H.E., et al. 2007. The origin of trisomy 13. *Am. J. Med. Genet. A* 143: 2242-2248.

## CHROMOSOMAL LOCATION

Genetic locus: RNF219 (human) mapping to 13q31.1; Rnf219 (mouse) mapping to 14 E2.3.

## SOURCE

RNF219 (T-17) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of RNF219 of human origin.

## PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-84039 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-84039 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.

## APPLICATIONS

RNF219 (T-17) is recommended for detection of RNF219 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).

RNF219 (T-17) is also recommended for detection of RNF219 in additional species, including equine, canine and porcine.

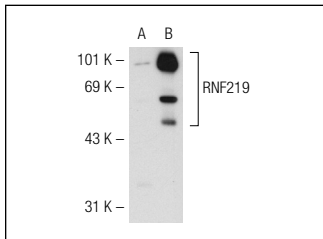
Suitable for use as control antibody for RNF219 siRNA (h): sc-105149, RNF219 siRNA (m): sc-153041, RNF219 shRNA Plasmid (h): sc-105149-SH, RNF219 shRNA Plasmid (m): sc-153041-SH, RNF219 shRNA (h) Lentiviral Particles: sc-105149-V and RNF219 shRNA (m) Lentiviral Particles: sc-153041-V.

RNF219 (T-17) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

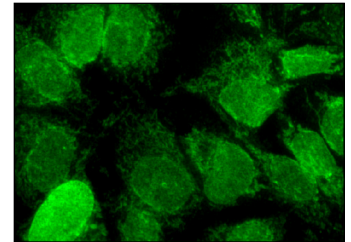
Molecular Weight of RNF219: 81 kDa.

Positive Controls: RNF219 (m): 293T Lysate: sc-123239.

## DATA



RNF219 (T-17): sc-84039. Western blot analysis of RNF219 expression in non-transfected: sc-117752 (A) and mouse RNF219 transfected: sc-123239 (B) 293T whole cell lysates.



RNF219 (T-17): sc-84039. Immunofluorescence staining of methanol-fixed Hep G2 cells showing nuclear and cytoplasmic localization.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.


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Try **RNF219 (A-4): sc-514812**, our highly recommended monoclonal alternative to RNF219 (T-17).