

# RNF180 (P-14): sc-137731

## 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. RNF180 (ring finger protein 180), also known as Rines, is a 592 single-pass membrane protein that contains a single RING-type zinc finger. Expressed as three alternatively spliced isoforms, RNF180 is well conserved among vertebrates. RNF180 is expressed in brain, kidney, testis and uterus and localizes to the endoplasmic reticulum. RNF180 is an E3 ubiquitin ligase involved in the ubiquitin-proteasome pathway. RNF180 is encoded by a gene located on human chromosome 5, which contains 181 million base pairs and comprises nearly 6% of the human genome. Deletion of the p arm of chromosome 5 leads to Cri du chat syndrome, while deletion of the q arm, or of chromosome 5 altogether, is common in therapy-related acute myelogenous leukemias and myelodysplastic syndrome.

## REFERENCES

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- 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.
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- South, S.T., et al. 2006. A new genomic mechanism leading to cri-du-chat syndrome. *Am. J. Med. Genet. A* 140: 2714-2720.
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- Ogawa, M., et al. 2008. Rines/RNF180, a novel RING finger-gene encoded product, is a membrane-bound ubiquitin ligase. *Genes Cells* 13: 397-409.

## CHROMOSOMAL LOCATION

Genetic locus: RNF180 (human) mapping to 5q12.3; Rnf180 (mouse) mapping to 13 D1.

## SOURCE

RNF180 (P-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of RNF180 of human origin.

## STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## 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-137731 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-137731 X, 200 µg/0.1 ml.

## APPLICATIONS

RNF180 (P-14) is recommended for detection of RNF180 of mouse, rat and human 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); non cross-reactive with other RNF family members.

RNF180 (P-14) is also recommended for detection of RNF180 in additional species, including equine.

Suitable for use as control antibody for RNF180 siRNA (h): sc-91806, RNF180 siRNA (m): sc-153027, RNF180 shRNA Plasmid (h): sc-91806-SH, RNF180 shRNA Plasmid (m): sc-153027-SH, RNF180 shRNA (h) Lentiviral Particles: sc-91806-V and RNF180 shRNA (m) Lentiviral Particles: sc-153027-V.

RNF180 (P-14) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of RNF180: 68 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) 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.

## 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.