

RNF170 (T-18): sc-98116

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. RNF170 (ring finger protein 170), also known as putative LAG1-interacting protein, FLJ38306 or DKFZp564A022, is a 258 amino acid multi-pass membrane protein containing one RING-type zinc finger. Five RNF170 isoforms are known to exist as a result of alternative splicing, and the gene encoding RNF170 maps to human chromosome 8p11.21. Consisting of nearly 146 million base pairs, chromosome 8 encodes over 800 genes and is associated with a variety of diseases and malignancies. Schizophrenia, bipolar disorder, Trisomy 8, Pfeiffer syndrome, congenital hypothyroidism, Waardenburg syndrome and some leukemias and lymphomas are thought to occur as a result of defects in specific genes that map to chromosome 8.

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. Kashino, G., et al. 2001. Preferential expression of an intact WRN gene in Werner syndrome cell lines in which a normal chromosome 8 has been introduced. *Biochem. Biophys. Res. Commun.* 289: 111-115.
4. Selicorni, A., et al. 2002. Cytogenetic mapping of a novel locus for type II Waardenburg syndrome. *Hum. Genet.* 110: 64-67.

CHROMOSOMAL LOCATION

Genetic locus: RNF170 (human) mapping to 8p11.21.

SOURCE

RNF170 (T-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of RNF170 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-98116 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-98116 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.

PROTOCOLS

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

APPLICATIONS

RNF170 (T-18) is recommended for detection of RNF170 of 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 RNF170-4.

RNF170 (T-18) is also recommended for detection of RNF170 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for RNF170 siRNA (h): sc-77659, RNF170 shRNA Plasmid (h): sc-77659-SH and RNF170 shRNA (h) Lentiviral Particles: sc-77659-V.

RNF170 (T-18) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight (predicted) of RNF170: 29 kDa.

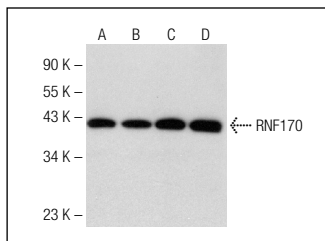
Molecular Weight (observed) of RNF170: 42 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, Hep G2 cell lysate: sc-2227 or Jurkat whole cell lysate: sc-2204.

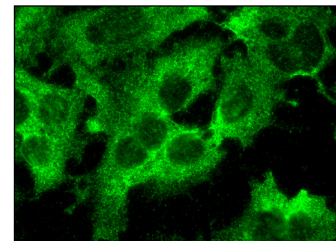
RECOMMENDED SECONDARY REAGENTS

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



RNF170 (T-18): sc-98116. Western blot analysis of RNF170 expression in Jurkat (A), Hep G2 (B), HeLa (C) and Raji (D) whole cell lysates.



RNF170 (T-18): sc-98116. Immunofluorescence staining of formalin-fixed HepG2 cells showing cytoplasmic localization.

RESEARCH USE

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