SANTA CRUZ BIOTECHNOLOGY, INC.

RNF152 (F-4): sc-398407

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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. RNF152 (ring finger protein 152) is a 203 amino acid protein that contains one RING-type zinc finger and may be involved in protein degradation events throughout the cell. The gene encoding RNF152 maps to human chromosome 18, which houses over 300 protein-coding genes and contains nearly 76 million bases. There are a variety of diseases associated with defects in chromosome 18-localized genes, some of which include Trisomy 18 (also known as Edwards syndrome), Niemann-Pick disease, hereditary hemorrhagic telangiectasia, erythropoietic protoporphyria and follicular lymphomas.

REFERENCES

1. Carstea, E.D., et al. 1993. Linkage of Niemann-Pick disease type C to human chromosome 18. Proc. Natl. Acad. Sci. USA 90: 2002-2004.
2. 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.
3. 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.

CHROMOSOMAL LOCATION

Genetic locus: RNF152 (human) mapping to 18q21.33; Rnf152 (mouse) mapping to 1 E2.1.

SOURCE

RNF152 (F-4) is a mouse monoclonal antibody raised against amino acids 65-130 mapping within an internal region of RNF152 of human origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

RNF152 (F-4) is recommended for detection of RNF152 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

Suitable for use as control antibody for RNF152 siRNA (h): sc-76415, RNF152 siRNA (m): sc-153020, RNF152 shRNA Plasmid (h): sc-76415-SH, RNF152 shRNA Plasmid (m): sc-153020-SH, RNF152 shRNA (h) Lentiviral Particles: sc-76415-V and RNF152 shRNA (m) Lentiviral Particles: sc-153020-V.

Molecular Weight (predicted) of RNF152: 22 kDa.

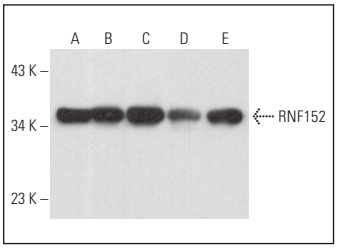
Molecular Weight (observed) of RNF152: 35-54 kDa.

Positive Controls: T98G cell lysate: sc-2294, EOC 20 whole cell lysate: sc-364187 or Neuro-2A whole cell lysate: sc-364185.

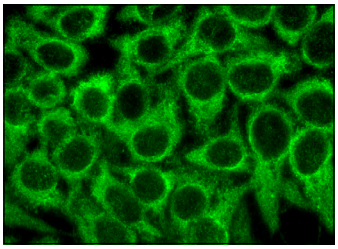
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



RNF152 (F-4): sc-398407. Western blot analysis of RNF152 expression in T98G (**A**), SK-N-SH (**B**), SH-SY5Y (**C**), Neuro-2A (**D**) and EOC 20 (**E**) whole cell lysates.



RNF152 (F-4): sc-398407. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic localization.

SELECT PRODUCT CITATIONS

1. Xiong, M.G., et al. 2020. RNF152 positively regulates TLR/IL-1R signaling by enhancing MyD88 oligomerization. EMBO Rep. 21: e48860.
2. Tao, Y., et al. 2024. Fasting-induced RNF152 resensitizes gallbladder cancer cells to gemcitabine by inhibiting mTORC1-mediated glycolysis. iScience 27: 109659.
3. Zhu, D., et al. 2023. RNF152 suppresses fatty acid oxidation and metastasis of lung adenocarcinoma by inhibiting IRAK1-mediated AKR1B10 expression. Am. J. Pathol. 193: 1603-1617.

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.

PROTOCOLS

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