

RNF38 (E-7): sc-515213

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. RNF38 (RING finger protein 38) is a 515 amino acid protein that contains one RING-type zinc finger through which it may play a role in transcriptional regulation and protein degradation events. Defects in the gene encoding RNF38 are associated with a variety of disorders, including acromesomelic dysplasia (AMDM), arthrogryposis distal multiplex congenita type 1 (AMCD1) and autosomal recessive ataxic cerebral palsy (ACP), as well as various malignancies. Two isoforms of RNF38 are expressed due to alternative splicing events.

REFERENCES

- 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.
- Lorick, K.L., et al. 1999. RING fingers mediate ubiquitin-conjugating enzyme (E2)-dependent ubiquitination. *Proc. Natl. Acad. Sci. USA* 96: 11364-11369.
- Eisenberg, I., et al. 2002. Cloning and characterization of a novel human gene RNF38 encoding a conserved putative protein with a RING finger domain. *Biochem. Biophys. Res. Commun.* 294: 1169-1176.
- Colland, F., et al. 2004. Functional proteomics mapping of a human signaling pathway. *Genome Res.* 14: 1324-1332.
- Penengo, L., et al. 2006. Crystal structure of the ubiquitin binding domains of rabex-5 reveals two modes of interaction with ubiquitin. *Cell* 124: 1183-1195.

CHROMOSOMAL LOCATION

Genetic locus: RNF38 (human) mapping to 9p13.2; Rnf38 (mouse) mapping to 4 B1.

SOURCE

RNF38 (E-7) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 86-102 within an internal region of RNF38 of human origin.

PRODUCT

Each vial contains 200 µg IgM kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-515213 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-515213 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

RESEARCH USE

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

APPLICATIONS

RNF38 (E-7) is recommended for detection of RNF38 isoforms 1 and 2 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 RNF38 siRNA (h): sc-92932, RNF38 siRNA (m): sc-153048, RNF38 shRNA Plasmid (h): sc-92932-SH, RNF38 shRNA Plasmid (m): sc-153048-SH, RNF38 shRNA (h) Lentiviral Particles: sc-92932-V and RNF38 shRNA (m) Lentiviral Particles: sc-153048-V.

RNF38 (E-7) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

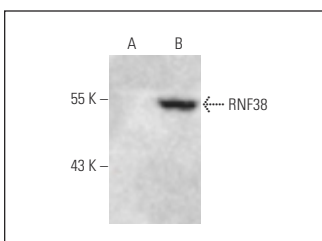
Molecular Weight of RNF38: 49 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227 or RNF38 (h2): 293T Lysate: sc-129678.

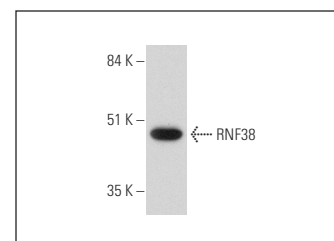
RECOMMENDED SUPPORT REAGENTS

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 L-Agarose: sc-2336 (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



RNF38 (E-7): sc-515213. Western blot analysis of RNF38 expression in non-transfected: sc-117752 (A) and human RNF38 transfected: sc-129678 (B) 293T whole cell lysates.



RNF38 (E-7): sc-515213. Western blot analysis of RNF38 expression in Hep G2 whole cell lysate.

SELECT PRODUCT CITATIONS

- Jia, Y., et al. 2021. Circ_LDLR knockdown suppresses progression of hepatocellular carcinoma via modulating miR-7/RNF38 axis. *Cancer Manag. Res.* 13: 337-349.

STORAGE

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