

# RNF10 (E-18): sc-162112

## 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. RNF10 (ring finger protein 10), also known as RIE2, is an 811 amino acid protein that localizes to the cytoplasm and contains one RING-type zinc finger. Existing as multiple alternatively spliced isoforms, RNF10 interacts with MOX-2 and is thought to regulate its transcription in schwann cells, possibly playing a role in myelin formation. The gene encoding RNF10 maps to human chromosome 12, which encodes over 1,100 genes and comprises approximately 4.5% of the human genome. Chromosome 12 is associated with a variety of diseases and afflictions, including hypochondrogenesis, achondrogenesis, Kniest dysplasia, Noonan syndrome and Trisomy 12p, which causes facial developmental defects and seizure disorders.

## REFERENCES

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- Lorick, K.L., et al. 1999. RING fingers mediate ubiquitin-conjugating enzyme (E2)-dependent ubiquitination. *Proc. Natl. Acad. Sci. USA* 96: 11364-11369.
- Seki, N., et al. 2000. cDNA cloning, expression profile, and genomic structure of human and mouse RNF10/Rnf 10 genes, encoding a novel RING finger protein. *J. Hum. Genet.* 45: 38-42.
- Lin, J., et al. 2005. Characterization of Mesenchyme Homeobox 2 (MEOX2) transcription factor binding to RING finger protein 10. *Mol. Cell. Biochem.* 275: 75-84.
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## CHROMOSOMAL LOCATION

Genetic locus: RNF10 (human) mapping to 12q24.31; Rnf10 (mouse) mapping to 5 F.

## SOURCE

RNF10 (E-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of RNF10 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-162112 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

RNF10 (E-18) is recommended for detection of RNF10 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.

RNF10 (E-18) is also recommended for detection of RNF10 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for RNF10 siRNA (h): sc-95703, RNF10 siRNA (m): sc-153000, RNF10 shRNA Plasmid (h): sc-95703-SH, RNF10 shRNA Plasmid (m): sc-153000-SH, RNF10 shRNA (h) Lentiviral Particles: sc-95703-V and RNF10 shRNA (m) Lentiviral Particles: sc-153000-V.

Molecular Weight of RNF10: 90 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.

## 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](http://www.scbt.com) or our catalog for detailed protocols and support products.