

# MGRN1 (N-16): sc-160519

## 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. MGRN1 (mahogunin, RING finger 1), also known as RNF156, is a 552 amino acid protein that contains one RING-type zinc finger and is subject to autoubiquitination. Playing a role in protein modification, MGRN1 is thought to function as an E3 ubiquitin-protein ligase, accepting ubiquitin (in the form of a thioester) from an E2 ubiquitin-conjugating enzyme and transferring that ubiquitin residue to substrates targeted for degradation. Four isoforms of MGRN1 exist due to alternative splicing events.

## REFERENCES

- Borden, K.L., et al. 1996. The RING finger domain: a recent example of a sequence-structure family. *Curr. Opin. Struct. Biol.* 6: 395-401.
- Nagase, T., et al. 1998. Prediction of the coding sequences of unidentified human genes. IX. The complete sequences of 100 new cDNA clones from brain which can code for large proteins *in vitro*. *DNA Res.* 5: 31-39.
- Lorick, K.L., et al. 1999. RING fingers mediate ubiquitin-conjugating enzyme (E2)-dependent ubiquitination. *Proc. Natl. Acad. Sci. USA* 96: 11364-11369.
- Phan, L.K., et al. 2002. The mouse mahogonoid coat color mutation disrupts a novel C<sub>3</sub>HC<sub>4</sub> RING domain protein. *J. Clin. Invest.* 110: 1449-1459.
- He, L., et al. 2003. Spongiform degeneration in mahogonoid mutant mice. *Science* 299: 710-712.
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## CHROMOSOMAL LOCATION

Genetic locus: MGRN1 (human) mapping to 16p13.3; Mgrn1 (mouse) mapping to 16 A1.

## SOURCE

MGRN1 (N-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of MGRN1 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-160519 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-160519 X, 200 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.

## APPLICATIONS

MGRN1 (N-16) is recommended for detection of MGRN1 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).

MGRN1 (N-16) is also recommended for detection of MGRN1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for MGRN1 siRNA (h): sc-92983, MGRN1 siRNA (m): sc-149417, MGRN1 shRNA Plasmid (h): sc-92983-SH, MGRN1 shRNA Plasmid (m): sc-149417-SH, MGRN1 shRNA (h) Lentiviral Particles: sc-92983-V and MGRN1 shRNA (m) Lentiviral Particles: sc-149417-V.

MGRN1 (N-16) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight (predicted) of MGRN1: 61 kDa.

Molecular Weight (observed) of MGRN1: 74 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.