

MGRN1 (h): 293T Lysate: sc-116092

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

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. 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.
3. Lorick, K.L., et al. 1999. RING fingers mediate ubiquitin-conjugating enzyme (E2)-dependent ubiquitination. *Proc. Natl. Acad. Sci. USA* 96: 11364-11369.
4. Phan, L.K., et al. 2002. The mouse mahogunoid coat color mutation disrupts a novel C₃HC₄ RING domain protein. *J. Clin. Invest.* 110: 1449-1459.
5. He, L., et al. 2003. Spongiform degeneration in mahogunoid mutant mice. *Science* 299: 710-712.
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CHROMOSOMAL LOCATION

Genetic locus: MGRN1 (human) mapping to 16p13.3.

PRODUCT

MGRN1 (h): 293T Lysate represents a lysate of human MGRN1 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

RESEARCH USE

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

APPLICATIONS

MGRN1 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive MGRN1 antibodies. Recommended use: 10-20 µl per lane.

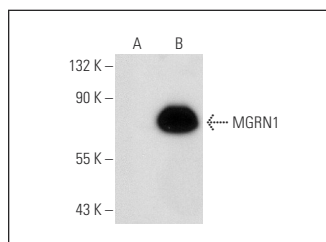
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

MGRN1 (LM-1A33): sc-134385 is recommended as a positive control antibody for Western Blot analysis of enhanced human MGRN1 expression in MGRN1 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

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.

DATA



MGRN1 (LM-1A33): sc-134385. Western blot analysis of MGRN1 expression in non-transfected: sc-117752 (A) and human MGRN1 transfected: sc-116092 (B) 293T whole cell lysates.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

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