

RAP55 (m): 293T Lysate: sc-127442

BACKGROUND

RAP55, also known as LSM14A (LSM14 homolog A), is a 463 amino acid member of the LSM14 family that contains a FFD-TFG box domain. The LSM14 domain and the RGG repeats of RAP55 are required for accumulation in P-bodies, and the region containing the FDF motif is responsible for cytoplasmic retention. RAP55, and all other Sm-like proteins, contain the Sm sequence motif, which consists of two regions separated by a linker of variable length that folds as a loop. The Sm-like proteins are thought to form a stable heteromer present in tri-snRNP particles, which are important for pre-mRNA splicing. RAP55 is phosphorylated upon DNA damage, probably by ATM or ATR. Existing as two alternatively spliced isoforms, the RAP55 gene is conserved in chimpanzee, canine, bovine, mouse, rat, chicken, zebrafish, mosquito, *Drosophila*, *C. elegans*, *S. pombe*, *S. cerevisiae*, *K. lactis*, *E. gossypii*, *M. grisea* and *N. crassa*, and maps to human chromosome 19q13.11.

REFERENCES

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3. Yang, W.H., Yu, J.H., Gulick, T., Bloch, K.D. and Bloch, D.B. 2006. RNA-associated protein 55 (RAP55) localizes to mRNA processing bodies and stress granules. *RNA* 12: 547-554.
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CHROMOSOMAL LOCATION

Genetic locus: Lsm14a (mouse) mapping to 7 B1.

PRODUCT

RAP55 (m): 293T Lysate represents a lysate of mouse RAP55 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

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.

APPLICATIONS

RAP55 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive RAP55 antibodies. Recommended use: 10-20 µl per lane.

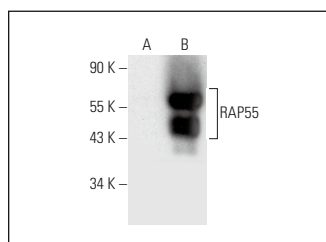
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

RAP55 (C-5): sc-398552 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse RAP55 expression in RAP55 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

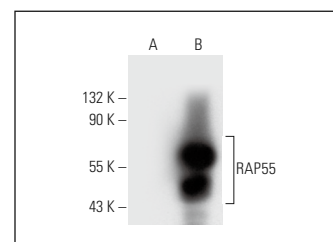
RECOMMENDED SUPPORT REAGENTS

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



RAP55 (C-5): sc-398552. Western blot analysis of RAP55 expression in non-transfected: sc-117752 (A) and mouse RAP55 transfected: sc-127442 (B) 293T whole cell lysates.



RAP55 (G-5): sc-398633. Western blot analysis of RAP55 expression in non-transfected: sc-117752 (A) and mouse RAP55 transfected: sc-127442 (B) 293T whole cell lysates.

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.