

MRP-L12 (m2): 293T Lysate: sc-125637

BACKGROUND

MRP-L12 (mitochondrial ribosomal protein-L12), also referred to as 5c5-2, L12mt, MRPL7 or RPML12, is a mammalian mitochondrial ribosomal protein that is involved in protein synthesis within the mitochondrion. MRP-L12 is enhanced in growth-stimulated cells as a result of transcriptional activation, suggesting that it may function as a translational regulator of mitochondrial mRNAs. Impairment of MRP-L12 leads to reduction in cell growth rate, decreased mitochondrial ATP production and abolition of mitochondrial oxidative phosphorylation. MRP-L12 is cleaved during its translocation across the mitochondrial membrane and it exists as dimers that bind the large ribosomal subunit. MRP-L12 is 198 amino acids in length, belongs to the ribosomal protein L12P family and is highly expressed in the colon.

REFERENCES

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2. Marty, L., Taviaux, S. and Fort, P. 1997. Expression and human chromosomal localization to 17q25 of the growth-regulated gene encoding the mitochondrial ribosomal protein MRPL12. *Genomics* 41: 453-457.
3. Johnson, D.F., Hamon, M. and Fischel-Ghodsian, N. 1998. Characterization of the human mitochondrial ribosomal S12 gene. *Genomics* 52: 363-368.
4. Online Mendelian Inheritance in Man, OMIM[™]. 1998. Johns Hopkins University, Baltimore, MD. MIM Number: 602375. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
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CHROMOSOMAL LOCATION

Genetic locus: Mrpl12 (mouse) mapping to 11 E2.

PRODUCT

MRP-L12 (m2): 293T Lysate represents a lysate of mouse MRP-L12 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.

PROTOCOLS

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

APPLICATIONS

MRP-L12 (m2): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive MRP-L12 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.

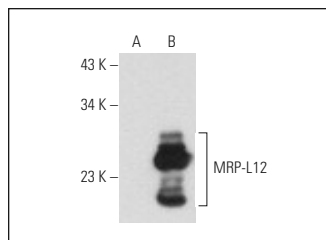
MRP-L12 (397.1): sc-100839 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse MRP-L12 expression in MRP-L12 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

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



MRP-L12 (397.1): sc-100839. Western blot analysis of MRP-L12 expression in non-transfected: sc-117752 (A) and mouse MRP-L12 transfected: sc-125637 (B) 293T whole cell lysates.

RESEARCH USE

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