



# SZABO SCANDIC

Part of Europa Biosite

## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!  
See the following pages for more information!



### Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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## IRP-1 (m): 293T Lysate: sc-125502

### BACKGROUND

Iron metabolism is essential for sustaining mammalian homeostasis. Iron uptake and distribution is a highly regulated process in mammalian cells that is monitored by two iron sensing proteins iron regulatory protein-1 and -2, also known as IRP-1 and -2, iron responsive element-binding protein IRE-BP-1 and -2, or Aconitase 1 and 2. IRP-1 and IRP-2 are important soluble regulatory factors that mediate iron uptake and storage in mammalian cells. IRP-1 and 2 are capable of either repressing translation or enhancing mRNA stability by associating with stem-loop motifs known as iron-responsive elements (IREs). IRPs respond to stress mediators, iron concentration and signaling factors, including nitrogen monoxide, cytokines and hydrogen peroxide.

### REFERENCES

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2. Hentze, M.W. and Argos, P. 1991. Homology between IRE-BP, a regulatory RNA-binding protein, aconitase, and isopropylmalate isomerase. *Nucleic Acids Res.* 19: 1739-1740.
3. Kaptain, S., Downey, W.E., Tang, C., Philpott, C., Haile, D., Orloff, D.G., Harford, J.B., Rouault, T.A. and Klausner, R.D. 1991. A regulated RNA binding protein also possesses aconitase activity. *Proc. Natl. Acad. Sci. USA* 88: 10109-10113.
4. Hirling, H., Emery-Goodman, A., Thompson, N., Neupert, B., Seiser, C. and Kuhn, L.C. 1992. Expression of active iron regulatory factor from a full-length human cDNA by *in vitro* transcription/translation. *Nucleic Acids Res.* 20: 33-39.
5. Rouault, T.A. and Klausner, R.D. 1996. The impact of oxidative stress on eukaryotic iron metabolism. *EXS* 77: 183-197.
6. Online Mendelian Inheritance in Man, OMIM™. 2000. Johns Hopkins University, Baltimore, MD. MIM Number: 100880. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
7. LocusLink Report (LocusID: 48). <http://www.ncbi.nlm.nih.gov/LocusLink/>

### CHROMOSOMAL LOCATION

Genetic locus: Aco1 (mouse) mapping to 4 A5.

### PRODUCT

IRP-1 (m): 293T Lysate represents a lysate of mouse IRP-1 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](http://www.scbt.com) for detailed protocols and support products.

### APPLICATIONS

IRP-1 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive IRP-1 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.

### RESEARCH USE

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