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Diagnostik & molekulare Diagnostik



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### Zuschläge

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- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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## Ero1-L $\alpha$ (m): 293T Lysate: sc-120109

### BACKGROUND

Ero1-L $\alpha$  (endoplasmic oxidoreductin-1-like), also known as Ero1 $\alpha$  or oxidoreductin-1-L $\alpha$ , is an essential oxidoreductase that oxidizes proteins and is required for the folding of immunoglobulins. Ero1-L $\alpha$  covalently binds with PDI (protein disulfide-isomerase) and together they produce disulfide bonds between proteins in the endoplasmic reticulum. Ero1-L $\alpha$  and SIRT1 regulate adiponectin secretion from adipose tissue. Ero1-L $\alpha$  and associated proteins also modulate PPAR $\gamma$  (peroxisome proliferator-activated receptor  $\gamma$ ) and SIRT1 activities. Ero1-L $\alpha$  is stimulated by hypoxia, suggesting that it is regulated through the HIF (hypoxia inducible transcription factor) pathway. Ero1-L $\alpha$  is ubiquitously expressed at low levels but expressed at high levels in upper digestive tract and esophagus. Ero1-L $\alpha$  may function both as a monomer and a homodimer.

### REFERENCES

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2. Frand, A.R., et al. 2000. Pathways for protein disulphide bond formation. *Trends Cell Biol.* 10: 203-210.
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4. Gess, B., et al. 2003. The cellular oxygen tension regulates expression of the endoplasmic oxidoreductase Ero1-L $\alpha$ . *Eur. J. Biochem.* 270: 2228-2235.
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7. Wang, Z.V., et al. 2007. Secretion of the adipocyte-specific secretory protein adiponectin critically depends on thiol-mediated protein retention. *Mol. Cell. Biol.* 27: 3716-3731.
8. Qiang, L., et al. 2007. Adiponectin secretion is regulated by SIRT1 and the endoplasmic reticulum oxidoreductase Ero1-L $\alpha$ . *Mol. Cell. Biol.* 27: 4698-4707.
9. Chakravarthi, S., et al. 2007. Intracellular catalysis of disulfide bond formation by the human sulfhydryl oxidase, QSOX1. *Biochem. J.* 404: 403-411.

### CHROMOSOMAL LOCATION

Genetic locus: Ero1l (mouse) mapping to 14 C1.

### PRODUCT

Ero1-L $\alpha$  (m): 293T Lysate represents a lysate of mouse Ero1-L $\alpha$  transfected 293T cells and is provided as 100  $\mu$ g protein in 200  $\mu$ l SDS-PAGE buffer.

### STORAGE

Store at -20 $^{\circ}$  C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

### APPLICATIONS

Ero1-L $\alpha$  (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive Ero1-L $\alpha$  antibodies. Recommended use: 10-20  $\mu$ l 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.

### PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.