

Ero1-L α (P-20): sc-79942

BACKGROUND

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

REFERENCES

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3. Cabibbo, A., et al. 2000. ERO1-L, a human protein that favors disulfide bond formation in the endoplasmic reticulum. *J. Biol. Chem.* 275: 4827-4833.
4. Gess, B., et al. 2003. The cellular oxygen tension regulates expression of the endoplasmic oxidoreductase Ero1-L α . *Eur. J. Biochem.* 270: 2228-2235.
5. Bertoli, G., et al. 2004. Two conserved cysteine triads in human Ero1 α cooperate for efficient disulfide bond formation in the endoplasmic reticulum. *J. Biol. Chem.* 279: 30047-30052.
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CHROMOSOMAL LOCATION

Genetic locus: ERO1L (human) mapping to 14q22.1; Ero1I (mouse) mapping to 14 C1.

SOURCE

Ero1-L α (P-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Ero1-L α of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-79942 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Ero1-L α (P-20) is recommended for detection of Ero1-L α of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Ero1-L α siRNA (h): sc-77284, Ero1-L α siRNA (m): sc-77285, Ero1-L α shRNA Plasmid (h): sc-77284-SH, Ero1-L α shRNA Plasmid (m): sc-77285-SH, Ero1-L α shRNA (h) Lentiviral Particles: sc-77284-V and Ero1-L α shRNA (m) Lentiviral Particles: sc-77285-V.

Molecular Weight of Ero1-L α : 54 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, ES-2 cell lysate: sc-24674 or HISM cell lysate: sc-2229.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

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

PROTOCOLS

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


 MONOS
Satisfaction
Guaranteed

Try **Ero1-L α (D-7): sc-365526** or **Ero1-L α (YW-8): sc-100805**, our highly recommended monoclonal alternatives to Ero1-L α (P-20).