**BACKGROUND**

Ero1-Lα (endoplasmic oxidoreductin-1-like), also known as Ero1α or oxidoreductin-1-Lα, is an essential oxidoreductase that oxidizes proteins and is required for the folding of immunoglobulins. Ero1-Lα covalently binds with PDI (protein disulfide-isomerase) and together they produce disulfide bonds between proteins in the endoplasmic reticulum. Ero1-Lα and SIRT1 regulate adiponectin secretion from adipose tissue. Ero1-Lα and associated proteins also modulate PPARγ (peroxisome proliferator-activated receptor γ) and SIRT1 activities. Ero1-Lα is stimulated by hypoxia, suggesting that it is regulated through the HIF (hypoxia inducible transcription factor) pathway. Ero1-Lα is ubiquitously expressed at low levels but expressed at high levels in upper digestive tract and esophagus. Ero1-Lα may function both as a monomer and a dimer.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: ERO1L (human) mapping to 14q22.1; Ero1l (mouse) mapping to 14 C1.

**SOURCE**

Ero1-Lα (YW-8) is a mouse monoclonal antibody raised against recombinant Ero1-Lα of human origin.

**PRODUCT**

Each vial contains 100 µg IgGκ kappa light chain in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

**APPLICATIONS**

Ero1-Lα (YW-8) is recommended for detection of Ero1-Lα in mouse, rat and human origin by Western blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).


Molecular Weight of Ero1-Lα: 54 kDa.

Positive Controls: OV-90 whole cell lysate: sc-384191, HeLa whole cell lysate: sc-2200 or ES-2 cell lysate: sc-24674.

**RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended:

1) Western Blotting: use m-IgGk 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, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048.
2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

**DATA**

![Western blot analysis of Ero1-Lα expression in HeLa (A), OV-90 (B), and ES-2 (C) whole cell lysates.](image)

**SELECT PRODUCT CITATIONS**


**STORAGE**

Store at 4° C, **D O 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 website at www.scbt.com for detailed protocols and support products.