



ERO1 (ERO1-Lalpha, Oxidoreductin-1-Lalpha, Endoplasmic Oxidoreductin-1-like Protein, ERO1-L)

Catalog number

E3452-85

Supplier

United States Biological

Perhaps the most distinctive feature of protein folding in the ER is the abundance of disulfide bonds that must form during maturation of proteins traveling along the secretory pathway. Formation of disulfide bonds is a redox reaction. Thus, to match the flux of disulfide bonds that exit from the ER by virtue of protein secretion, a flux of oxidizing equivalents into the ER is required. In eukaryotic cells, the essential protein relay supporting this flux, and hence disulfide bond formation, involves endoplasmic reticulum oxidoreductin 1 (Ero1) and protein disulfide isomerase (PDI). The temporal pattern of hypoxic ERO1-L alpha induction is very similar to that of genes triggered by the hypoxia inducible transcription factor (HIF-1) and is characteristically mimicked by cobalt and by deferoxamine, but is absent in cells with a defective aryl hydrocarbon receptor translocator (ARNT, HIF-1 alpha). We speculate from these findings that the expression of ERO1-L alpha is probably regulated via the HIF-pathway and thus belongs to the family of classic oxygen regulated genes.

Positive Control

293T, INS-1, and MIN6 cell lysates.

Applications

Suitable for use in Western Blot and Immunohistochemistry. Other applications not tested.

Recommended Dilution

Optimal dilutions to be determined by the researcher.

Storage and Stability

May be stored at 4°C for short-term only. Aliquot to avoid repeated freezing and thawing. Store at -20°C. Aliquots are stable for 12 months after receipt. For maximum recovery of product, centrifuge the original vial after thawing and prior to removing the cap.

Immunogen

Synthetic peptide corresponding to the N-terminal region of human ERO1L.

Formulation

Supplied as a liquid in PBS, 1% BSA.

Purity

Purified by immunoaffinity chromatography.

Specificity

Recognizes human ERO1. Species Crossreactivity: mouse and rat

Product Type



Pab

Source

human

Isotype

IgG

Grade

Affinity Purified

Applications

IHC WB

Crossreactivity

Hu Mo Rt

Storage

-20°C