9051 Mira Mesa Blvd, #910094
San Diego, CA 92191
Tel: 760-390-3989

# ERO1L Human

*ERO1-Like Human Recombinant*
*RCP0775*

## Product Overview

| | |
|---|---|
| Name | ERO1L Human |
| **Description** | |
| ERO1-Like Human Recombinant | |
| Accession (Primary) | Q96HE7 |
| **Synonyms** | |
| ERO1-Like (S. Cerevisiae), Endoplasmic Oxidoreductin-1-Like Protein, Oxidoreductin-1-L-Alpha, ERO1-L-Alpha, ERO1LA, ERO1-L, ERO1 (S. Cerevisiae)-Like, ERO1-Like Protein Alpha, ERO1-Alpha, EC 1.8.4.-, EC 1.8.4, ERO1A, ERO1L. | |
| **Introduction** | |
| ERO1-like protein alpha (ERO1L) is an essential oxidoreductase, which oxidizes proteins and is necessary for the folding of immunoglobulins. ERO1L covalently binds with PDI (protein disulfide-isomerase) and jointly they generate disulfide bonds between proteins in the endoplasmic reticulum. ERO1L is stimulated by hypoxia, proposing that ERO1L is regulated through the HIF (hypoxia inducible transcrip-tion factor) pathway. At low levels ERO1L is ubiquitously expressed, however at high levels it is expressed in the upper digestive tract and esophagus. In addition, ERO1L is involved in the release of the unfolded cholera toxin from reduced P4HB/PDI in case of infection by V.cholerae, thus having a role in retrotranslocation of the toxin. Furthermore, ERO1L plays an important role in ER stress-induced, CHOP-dependent apoptosis by activating the inositol 1,4,5-trisphosphate receptor IP3R1. | |
| **Source** | |
| Escherichia Coli. | |
| **Physical Appearance** | |
| Sterile Filtered colorless solution. | |
| **Formulation** | |
| The ERO1L solution (1mg/ml) contains 20mM Tris-HCl buffer (pH 8.0) and 10% glycerol. | |
| **Stability** | |
| Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles. | |
| **Purity** | |
| Greater than 90.0% as determined by SDS-PAGE. | |

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**Amino acid sequence**

MGSSHHHHHH SSGLVPRGSH MGS EEQPPET AAQRCFCQVS GYLDDCTCDV ETIDRFNNYR LFPRLQKLLE SDYFRYYKVN LKRPCPFWND ISQCGRRDCA VKPCQSDEVP DGIKSASYKY SEEANNLIEE CEQAERLGAV DESLSEETQK AVLQWTKHDD SSDNFCEADD IQSPEAEYVD LLLNPERYTG YKGPDAWKIW NVIYEENCFK PQTIKRPLNP LASGQGTSEE NTFYSWLEGL CVEKRAFYRL ISGLHASINV HLSARYLLQE TWLEKKWGHN ITEFQQRFDG ILTEGEGPRR LKNLYFLYLI ELRALSKVLP FFERPDFQLF TGNKIQDEEN KMLLLEILHE IKSFPLHFDE NSFFAGDKKE AHKLKEDFRL HFRNISRIMD CVGCFKCRLW GKLQTQGLGT ALKILFSEKL IANMPESGPS YEFHLTRQEI VSLFNAFGRI STSVKELENF RNLLQNIH.

**Precautions**

ERO1L Human is for research use only and not for use in diagnostic or therapeutic procedures.

## Target Information: ( Q96HE7 )