

## Recombinant Human ERO1A/ERO1L Protein (His Tag)

Catalog No. PKSH032401

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

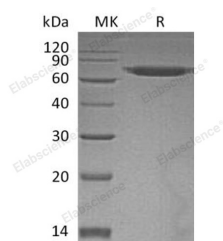
### Description

|                                    |                                                                                                                    |
|------------------------------------|--------------------------------------------------------------------------------------------------------------------|
| <b>Synonyms</b>                    | ERO1-Like Protein Alpha;ERO1-L;ERO1-L-Alpha;Endoplasmic Oxidoreductin-1-Like Protein;Oxidoreductin-1-L-Alpha;ERO1L |
| <b>Species</b>                     | Human                                                                                                              |
| <b>Expression Host</b>             | HEK293 Cells                                                                                                       |
| <b>Sequence</b>                    | Glu24-His468                                                                                                       |
| <b>Accession</b>                   | Q96HE7                                                                                                             |
| <b>Calculated Molecular Weight</b> | 53.0 kDa                                                                                                           |
| <b>Observed molecular weight</b>   | 71 kDa                                                                                                             |
| <b>Tag</b>                         | C-His                                                                                                              |
| <b>Bioactivity</b>                 | Not validated for activity                                                                                         |

### Properties

|                       |                                                                                                                                                                                                                                                         |
|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Purity</b>         | > 95 % as determined by reducing SDS-PAGE.                                                                                                                                                                                                              |
| <b>Endotoxin</b>      | < 1.0 EU per µg of the protein as determined by the LAL method.                                                                                                                                                                                         |
| <b>Storage</b>        | Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.                   |
| <b>Shipping</b>       | This product is provided as lyophilized powder which is shipped with ice packs.                                                                                                                                                                         |
| <b>Formulation</b>    | Lyophilized from a 0.2 µm filtered solution of 20mM PB,150mM NaCl,pH7.4. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual. |
| <b>Reconstitution</b> | Please refer to the printed manual for detailed information.                                                                                                                                                                                            |

### Data



> 95 % as determined by reducing SDS-PAGE.

### Background

ERO1-Like Protein  $\alpha$  (ERO1L) is an enzyme that belongs to the EROs family. ERO1L is expressed at high level in

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esophagus and upper digestive tract. ERO1L is an essential oxidoreductase that oxidizes proteins in the endoplasmic reticulum to produce disulfide bonds. ERO1L acts by oxidizing directly P4HB/PDI isomerase through a direct disulfide exchange. It associates with ERP44, demonstrating that it does not oxidize all PDI related proteins and can discriminate between PDI and related proteins. Its reoxidation probably involves electron transfer to molecular oxygen via FAD. ERO1L may be responsible for a significant proportion of reactive oxygen species (ROS) in the cell. ERO1L responses to temperature stimulus, protein thiol-disulfide exchange, protein folding with or without chaperone cofactor and transport.