

Product datasheet for PH303840

ERO1L (ERO1A) (NM_014584) Human Mass Spec Standard

Product data:

Product Type:	Mass Spec Standards
Description:	ERO1L MS Standard C13 and N15-labeled recombinant protein (NP_055399)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC203840
Predicted MW:	54.4 kDa
Protein Sequence:	>RC203840 protein sequence Red=Cloning site Green=Tags(s)

MGRGWGFLFGLLGAVWLLSSGHGEEQPPETAARCFQVSGYLDCTCDVETIDRFNNYRLFPRLQKLE
SDYFRYYKVNLRPCPFWNDISQCGRRDCAVKPCQSDEVPDGIKSASYKYSEEANNLIEECEQAERLGAV
DESLSEETQKAVLQWTKHDDSSDNFCEADDIQSPEAEYVDLLNPERYTGKGPDAWKIWNVIYEENCFK
PQTIKRPLNPLASGQGTSEENTFYSWLEGLCVEKRAFYLISGLHASINVHLSARYLLQETWLEKKWGHN
ITEFQQRFDGILTEGEGPRRLKNLYFLYLIELRALSKVLPFFERPDFQLFTGNKIQDEENKMLLLEILHE
IKSFPLHFDENSFFAGDKKEAHKLEDFRLHFRNISRIMDCVGCFCRLWGKLQTQGLGTALKILFSEKL
IANMPESGPSYEFHLTRQEIVSLFNAFGRISTSVKELENFRNLLQNIH

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag:	C-Myc/DDK
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Labeling Method:	Labeled with [U- ¹³ C ₆ , ¹⁵ N ₄]-L-Arginine and [U- ¹³ C ₆ , ¹⁵ N ₂]-L-Lysine
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3
Storage:	Store at -80°C. Avoid repeated freeze-thaw cycles.
Stability:	Stable for 3 months from receipt of products under proper storage and handling conditions.
RefSeq:	<u>NP_055399</u>
RefSeq Size:	3334
RefSeq ORF:	1404
Synonyms:	ERO1-alpha; ERO1-L; ERO1-L-alpha; Ero1alpha; ERO1L; ERO1LA



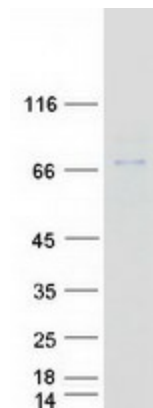
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Locus ID: 30001
UniProt ID: [Q96HE7](#)
Cytogenetics: 14q22.1

Summary: Oxidoreductase involved in disulfide bond formation in the endoplasmic reticulum. Efficiently reoxidizes P4HB/PDI, the enzyme catalyzing protein disulfide formation, in order to allow P4HB to sustain additional rounds of disulfide formation. Following P4HB reoxidation, passes its electrons to molecular oxygen via FAD, leading to the production of reactive oxygen species (ROS) in the cell. Required for the proper folding of immunoglobulins. Involved in the release of the unfolded cholera toxin from reduced P4HB/PDI in case of infection by *V.cholerae*, thereby playing a role in retrotranslocation of the toxin. Plays an important role in ER stress-induced, CHOP-dependent apoptosis by activating the inositol 1,4,5-trisphosphate receptor IP3R1.[UniProtKB/Swiss-Prot Function]

Protein Pathways: Vibrio cholerae infection

Product images:



Coomassie blue staining of purified ERO1A protein (Cat# [TP303840]). The protein was produced from HEK293T cells transfected with ERO1A cDNA clone (Cat# [RC203840]) using MegaTran 2.0 (Cat# [TT210002]).