Data Sheet (Cat.No.TMPY-03178)

TargetMol

ERP72 Protein, Human, Recombinant (His)

General Information

Synonyms:	ERP70;ERP72;ERp-72;protein disulfide isomerase family A, member 4
Protein Construction:	A DNA sequence encoding the human PDIA4 (P13667) (Met1-Thr641) was expressed with a polyhistidine tag at the C-terminus. Predicted N terminal: Val 21
Species:	Human
Expression Host:	HEK293 Cells
Accession:	P13667
Molecular Weight:	71.6 kDa (predicted); 67 kDa (reducing conditions)

QC Testing

Biological Activity:	Activity testing is in progress. It is theoretically active, but we cannot guarantee it. If you require protein activity, we recommend choosing the eukaryotic expression version first.
Purity:	> 95 % as determined by SDS-PAGE
Endotoxin:	< 1.0 EU/μg of the protein as determined by the LAL method.
Formulation:	Lyophilized from a solution filtered through a 0.22 μm filter, containing PBS, pH 7.4. Typically, a mixture containing 5% to 8% trehalose, mannitol, and 0.01% Tween 80 is incorporated as a protective agent before lyophilization.

Preparation and Storage

Reconstitution:

A Certificate of Analysis (CoA) containing reconstitution instructions is included with the products. Please refer to the CoA for detailed information.

Stability & Storage:

It is recommended to store recombinant proteins at -20°C to -80°C for future use. Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Shipping:

In general, Lyophilized powders are shipping with blue ice.

Protein Background

ERP72, also known as PDIA4, is an endoplasmic reticulum luminal protein which belongs to the protein disulfide isomerase family. ERP72 is a stress protein and participates in the catalysis of protein-S-S-bond rearrangement. Both PDIA4 and PDIA3 function as proteases, protein disulfide isomerases, phospholipases or an arrangement of these. ERP72 compose part of a large chaperone multiprotein complex comprising CABP1, DNAJB11, HSP90B1, HSPA5, HYOU, PDIA2, PDIA4, PPIB, SDF2L1, UGT1A1 and very small amounts of ERP29, but not, or at very low levels,

CALR nor CANX.

Reference

Tsai YC,et al. (2012) Functional proteomics establishes the interaction of SIRT7 with chromatin remodeling complexes and expands its role in regulation of RNA polymerase I transcription. Mol Cell Proteomics. 11(5):60-76.
Kim W,et al. (2011) Systematic and quantitative assessment of the ubiquitin-modified proteome. Mol Cell. 44(2): 325-40.
Vinayagam A,et al. (2011) A directed protein interaction network for investigating intracellular signal transduction. Sci Signal. 4(189):rs8.