



Recombinant Protein Technical Manual

Recombinant Human ERP27 Protein (Fc Tag)

RPES0463

Product Data:

Product SKU: RPES0463

Size: 20µg

Species: Human

Expression host: HEK293 Cells

Uniprot: Q96DN0

Protein Information:

Molecular Mass: 53.7 kDa

AP Molecular Mass:

Tag: C-Fc

Bio-activity:

Purity: > 84 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg of the protein as determined by the LAL method.

Storage: 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.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from sterile PBS, pH 7.4

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: Endoplasmic Reticulum Resident Protein 27; ER Protein 27; ERp27; ERP27; C12orf46

Immunogen Information:

Sequence: Glu26-Pro269

Background:

ERP27 contains 1 thioredoxin domain and is a noncatalytic member of the protein disulfide isomerase family. Protein disulfide isomerases (PDIs) constitute a family of structurally related enzymes which catalyze disulfide bonds formation, reduction, or isomerization of newly synthesized proteins in the lumen of the endoplasmic reticulum (ER). They act also as chaperones, and are, therefore, part of a quality-control system for the correct folding of the proteins in the same subcellular compartment. PDI has been found to have moderate effects (25-fold) on the rate of oxidative folding of proteins in vitro. Recombinant Human Protein Disulfide Isomerase is involved in disulphide-bond formation and isomerization, as well as the reduction of disulphide bonds in proteins. Recombinant PDI has been found to have moderate effects (25-fold) on the rate of oxidative folding of proteins in vitro. ERP27 is a widely expressed protein which localizes to the ER and may act as a protease, protein disulfide isomerase, thiol-disulfide oxidase or phospholipase. ERP27 doesn't contain a CXXC active site motif indicating that it is a catalytically redox-inactive member of the protein disulfide isomerase family.