

Product datasheet for **KN205940**

ERp57 (PDIA3) Human Gene Knockout Kit (CRISPR)

Product data:

Product Type: Knockout Kits (CRISPR)
Format: 2 gRNA vectors, 1 GFP-puro donor, 1 scramble control
Donor DNA: GFP-puro
Symbol: ERp57
Locus ID: 2923
Components: **KN205940G1**, ERp57 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: CGTGAGTTCTAGCACGTCGG
KN205940G2, ERp57 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: CGAGAGTCGCATCTCCGACA
KN205940D, donor DNA containing left and right homologous arms and GFP-puro functional cassette.

Homologous arm and GFP-puro sequences:

pUC vector backbone in gray; **Left arm sequence in blue**; **GFP-puro in green**; **Right arm in violet**

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GE100003, scramble sequence in pCas-Guide vector

Disclaimer:

These products are manufactured and supplied by OriGene under license from ERS. The kit is designed based on the best knowledge of CRISPR technology. The system has been functionally validated for knocking-in the cassette downstream the native promoter. The efficiency of the knock-out varies due to the nature of the biology and the complexity of the experimental process.

RefSeq:

[NM_005313](#)

UniProt ID:

[P30101](#)

Synonyms:

ER60; ERp57; ERp60; ERp61; GRP57; GRP58; HEL-S-93n; HEL-S-269; HsT17083; P58; PI-PLC

Summary:

This gene encodes a protein of the endoplasmic reticulum that interacts with lectin chaperones calreticulin and calnexin to modulate folding of newly synthesized glycoproteins. The protein was once thought to be a phospholipase; however, it has been demonstrated that the protein actually has protein disulfide isomerase activity. It is thought that complexes of lectins and this protein mediate protein folding by promoting formation of disulfide bonds in their glycoprotein substrates. This protein also functions as a molecular chaperone that prevents the formation of protein aggregates. [provided by RefSeq, Dec 2016]

Product images:

