

Product datasheet for TL313168

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

ERO1L (ERO1A) Human shRNA Plasmid Kit (Locus ID 30001)

Product data:

Product Type: shRNA Plasmids

Product Name: ERO1L (ERO1A) Human shRNA Plasmid Kit (Locus ID 30001)

Locus ID: 30001

Synonyms: ERO1-alpha; ERO1-L; ERO1-L-alpha; Ero1alpha; ERO1L; ERO1LA

Vector: pGFP-C-shLenti (TR30023) **E. coli Selection:** Chloramphenicol (34 ug/ml)

Mammalian Cell

Puromycin

Selection:

Format: Lentiviral plasmids

Components: ERO1A - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 30001).

5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pGFP-C-shLenti Vector, TR30021, included for free.

RefSeq: NM 014584, NM 014584.1, NM 014584.2, BC012941, BC012941.1, BC008674, NM 014584.3

UniProt ID: Q96HE7

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]

shRNA Design: These shRNA constructs were designed against multiple splice variants at this gene locus. To

be certain that your variant of interest is targeted, please contact <u>techsupport@origene.com</u>. If you need a special design or shRNA sequence, please utilize our <u>custom shRNA service</u>.







Performance Guaranteed:

OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. Western Blot data is recommended over qPCR to evaluate the silencing effect of the shRNA constructs 72 hrs post transfection. To properly assess knockdown, the gene expression level from the included scramble control vector must be used in comparison with the target-specific shRNA transfected samples.

For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at techsupport@origene.com. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).