

# **Product datasheet for TL320345V**

### OriGene Technologies, Inc.

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## IRE1 (ERN1) Human shRNA Lentiviral Particle (Locus ID 2081)

#### **Product data:**

**Product Type:** shRNA Lentiviral Particles

Product Name: IRE1 (ERN1) Human shRNA Lentiviral Particle (Locus ID 2081)

Locus ID: 2081

Synonyms: hIRE1p; IRE1; IRE1a; IRE1P

Vector: pGFP-C-shLenti (TR30023)

Format: Lentiviral particles

**Components:** ERN1 - Human shRNA lentiviral particles (4 unique 29mer target-specific shRNA, 1 scramble

control), 0.5 ml each, >10^7 TU/ml.

RefSeq: NM 001433, NM 152461, NM 001433.1, NM 001433.2, NM 001433.3, NM 152461.2,

BC070350, BC130405, BC130407, NM 001433.5

UniProt ID: 075460

Summary: This gene encodes the transmembrane protein kinase inositol-requiring enzyme 1. The

encoded protein contains two functional catalytic domains, a serine/threonine-protein kinase domain and an endoribonuclease domain. This protein functions as a sensor of unfolded proteins in the endoplasmic reticulum (ER) and triggers an intracellular signaling pathway termed the unfolded protein response (UPR). The UPR is an ER stress response that is conserved from yeast to mammals and activates genes involved in degrading misfolded proteins, regulating protein synthesis and activating molecular chaperones. This protein specifically mediates the splicing and activation of the stress response transcription factor X-

box binding protein 1. [provided by RefSeq, Aug 2017]

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>.



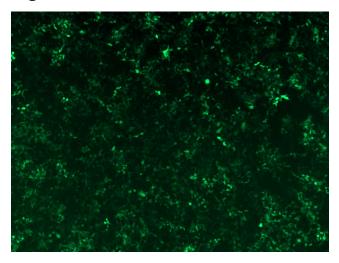


### Performance Guaranteed:

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.

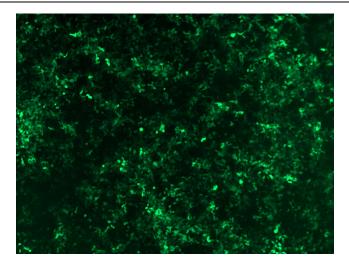
For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at techsupport@origene.com. Please provide your data indicating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

# **Product images:**

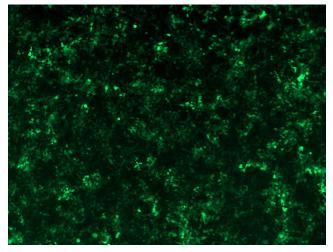


GFP signal was observed under microscope at 48 hours after transduction of TL320345A virus into HEK293 cells. TL320345A virus was prepared using lenti-shRNA TL320345A and [TR30037] packaging kit.

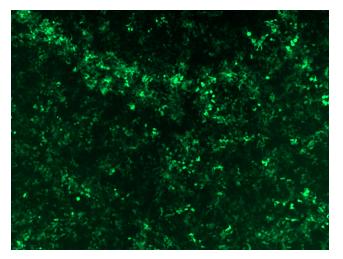




GFP signal was observed under microscope at 48 hours after transduction of TL320345B virus into HEK293 cells. TL320345B virus was prepared using lenti-shRNA TL320345B and [TR30037] packaging kit.



GFP signal was observed under microscope at 48 hours after transduction of [TL320345C] virus into HEK293 cells. [TL320345C] virus was prepared using lenti-shRNA [TL320345C] and [TR30037] packaging kit.



GFP signal was observed under microscope at 48 hours after transduction of [TL320345D] virus into HEK293 cells. [TL320345D] virus was prepared using lenti-shRNA [TL320345D] and [TR30037] packaging kit.