

## Product datasheet for **TR311989**

### **KDEL2 Human shRNA Plasmid Kit (Locus ID 11014)**

#### **Product data:**

Product Type:	shRNA Plasmids
Product Name:	KDEL2 Human shRNA Plasmid Kit (Locus ID 11014)
Locus ID:	11014
Synonyms:	ELP-1; ELP1; ERD2.2; OI21
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	KDEL2 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 11014). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	<a href="#">NM_001100603</a> , <a href="#">NM_006854</a> , <a href="#">NM_006854.1</a> , <a href="#">NM_006854.2</a> , <a href="#">NM_006854.3</a> , <a href="#">NM_001100603.1</a> , <a href="#">BC008081</a> , <a href="#">BC008081.2</a> , <a href="#">BC071982</a> , <a href="#">BC012994</a> , <a href="#">NM_001100603.2</a>
UniProt ID:	<a href="#">P33947</a>
Summary:	Retention of resident soluble proteins in the lumen of the endoplasmic reticulum (ER) is achieved in both yeast and animal cells by their continual retrieval from the cis-Golgi, or a pre-Golgi compartment. Sorting of these proteins is dependent on a C-terminal tetrapeptide signal, usually lys-asp-glu-leu (KDEL) in animal cells, and his-asp-glu-leu (HDEL) in <i>S. cerevisiae</i> . This process is mediated by a receptor that recognizes, and binds the tetrapeptide-containing protein, and returns it to the ER. In yeast, the sorting receptor encoded by a single gene, ERD2, is a seven-transmembrane protein. Unlike yeast, several human homologs of the ERD2 gene, constituting the KDEL receptor gene family, have been described. KDEL2 was the second member of the family to be identified, and it encodes a protein which is 83% identical to the KDEL1 gene product. Alternative splicing results in multiple transcript variants encoding distinct isoforms. [provided by RefSeq, Jul 2008]
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 <a href="mailto:techsupport@origene.com">techsupport@origene.com</a> . If you need a special design or shRNA sequence, please utilize our <a href="#">custom shRNA service</a> .



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**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](mailto: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).