

OmicsLink™ __. shRNA Clone Collections ⊷

OmicsLink[™] shRNA clone collections consist of lentiviral and other mammalian expression vector-based small hairpin RNA (shRNA) clones against genome-wide target genes from human, mouse and rat. A set of four expression constructs for every target gene ensures high knockdown efficiency with minimal off-target effects.



Figure 1. Lentiviral and non-viral expression vector-based shRNA clones.

Vector list

Vector	Promoter	Selection Marker	Reporter Gene	Viral type
psi-H1	H1	Puromycin	eGFP	N/A
psi-U6	U6	Puromycin	eGFP	N/A
psi-mH1	H1	Puromycin	mCherry	N/A
psi-mU6	U6	Puromycin	mCherry	N/A
psi-nH1	H1	Puromycin	N/A	N/A
psi-nU6	U6	Puromycin	N/A	N/A
psi-LVRH1GP	H1	Puromycin	eGFP	HIV
psi-LVRU6GP	U6	Puromycin	eGFP	HIV
psi-LVRH1MP	H1	Puromycin	mCherry	HIV
psi-LVRU6MP	U6	Puromycin	mCherry	HIV
psi-LVRH1P	H1	Puromycin	N/A	HIV
psi-LVRU6P	U6	Puromycin	N/A	HIV
psi-LVRU6GH	U6	Hygromycin	eGFP	HIV
psi-LVRH1GH	H1	Hygromycin	eGFP	HIV
psi-LVRU6MH	U6	Hygromycin	mCherry	HIV
psi-LVRH1MH	H1	Hygromycin	mCherry	HIV
psi-LVRU6H	U6	Hygromycin	N/A	HIV
psi-LVRH1H	H1	Hygromycin	N/A	HIV

Advantages

Guaranteed knockdown

- Four shRNA sequences are selected through a proprietary algorithm
- Guarantee at least one of the four will have a knockdown effect of 70% on corresponding gene expression as determined by qRT-PCR

Versatile delivery formats

 Available in expression plasmid or lentiviral particles for gene silencing in virtually all cell types including difficultto-transfect and non-dividing cells

Markers and reporters

• Enable stable cell line selection and expression verification

Fully sequenced

• The expression cassettes of all shRNA clones are fully sequenced

Applications

Single gene down-regulation — The knocking down (KD) effect of the shRNA clones for a single gene can be studied and compared with that of a scrambled nucleotide control clone which is included for free with every shRNA clone order.

Pathway analysis — Genes have been grouped into various signal transduction, metabolic, and disease pathways and associations, as well as gene families and groups. By arraying the shRNA clones of known pathway(s) in 96 or 384 well plates, the role for a group of genes can be studied in a pathway.

Validation studies — GeneCopoeia's OmicsLink[™] expression ready ORF cDNA clones together with the same ORF clones that contain silent mutations in shRNA target sequence regions can be used for shRNA validation studies and gene/protein functional rescue studies for genes/proteins targeted by corresponding shRNA.

Product	Description	
Lentifect™ Custom Lentivirus Production Services	Up to 10 ⁸ TU/ml, purified or ultra-purified lentiviral particles	
Lenti-Pac HIV Expression Packaging Kit	HIV-based lentiviral packaging plasmids, eGFP control clone and EndoFectin Lenti Transfection Reagent	
Lenti-Pac 293Ta Cell Line (1.5 x 10 ⁶ cells)	293Ta Lentiviral packaging cell line	
Lenti-Pac™ Lentivirus Concentration Solution (50 ml)	Quick and simple concentration of lentiviral particles	
Lenti-Pac HIV qRT-PCR Titration Kit	qRT-PCR based titration to determine the copy numbers of HIV lentiviral particles	
Genome-CRISP™ CRISPR sgRNA/Cas9 expression clones	sgRNA/Cas9 expression clones are available for targeting virtually any gene in any experimental system	
OmicsLink™ Lentiviral ORF Expression Clones	45,000 human and mouse clones available in lentiviral and non-viral expression vectors	

Related products



 $\label{eq:Figure 2.} \ensuremath{\text{Figure 2.}} \ensuremath{\text{Mechanism of shRNA}} \ensuremath{\text{vector-mediated gene silencing.}}$

For more information please contact us at inquiry@genecopoeia.com or 1-866-360-9531.