

Product Analysis Certificate

Control Lentiviral shRNA Construct
shLuc in pRS112-U6-sh-UbiC-TagRFP-2A-Puro (packaged)
Cat.# SHCTL-LUC-PX-pRS112-V



Control Lentiviral shRNA Construct

Shipment Contents: Control Lentiviral shRNA Construct
shLuc in pRS112-U6-sh-UbiC-TagRFP-2A-Puro (packaged)
- Store at -80°C

Description:

Cellecta's shRNA constructs are lentiviral vectors expressing short-hairpin RNA for knockdown of target mRNA transcripts. The use of our proprietary shRNA design algorithm and database of validated shRNAs results in a high percentage of functional sequences, typically at least 70% knockdown efficiency for approximately 70% of the shRNA constructs. Results may vary between different cell types.

The Control Lentiviral Luc (non-targeting) shRNA Construct expresses an shRNA that targets Firefly Luciferase but does not target any known human, mouse, or rat genes.

The titer of packaged constructs is functionally determined by transduction of 293T cells and either FACS of RFP- or GFP-positive cells, antibiotic selection assay, or by PCR titering of integrated viral DNA.

Biosafety Level: BSL-2

Storage: -80°C

Shelf Life: 1 year from date of receipt

Shipping Conditions: Dry Ice

Product Information (Cellecta Website):

User Manual: <https://www.cellecta.com/product-manuals-and-certificates/>
Vector Info (Sequence, etc.): <https://www.cellecta.com/vector-information/>

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Contents:

#	Catalog #	Description
1	CLVP-V (SHCTL-LUC-PX- pRS112-V)	Control Lentiviral shRNA Expression Construct shLuc in pRS112-U6-sh-UbiC-TagRFP-2A-Puro (Packaged) RefSeq# n/a <u>Packaged, $>1 \times 10^7$ TU:</u> 1.46×10^7 TU , 5.82×10^7 TU/ml (250 μ l total: 250 μ l \times 1 vial) Lot# 17071221; Store at -80°C
	Target Sequence:	CGCTGAGTACTTCGAAATGTC
	Insert (Hairpin) Seq.:	ACCGGCGCTGAGTACTTTGAAATGTTGTTAATATTCATAGCGACATTCGAAGTACTCAGCGTTTT
	Sequencing QC:	AGTTTGCAGTTTTAAATTAATGTTTTAAAAATGGACTATCATATGCTTACCGTAACTTGAAAGTATTCGATTT CTTGGCTTTATATATCTTGTGGAAGGACGAAACACCGGCGCTGAGTACTTTGAAATGTTGTTAATATTCAT AGCGACATTCGAAGTACTCAGCGTTTTTTCGGACTGTAGAACTCTGAACCTCTA
	Sequencing Primer:	ATTAGTACAAAATACGTGACGTAGAA (U6-3)

Design of Cellecta shRNA Constructs:

ACCGG-21mer (**sense**+mismatch(es)*)-GTTAATATTCATAGC (**loop**)-21mer (**antisense**)-TTTT

* **The sense portion of the shRNA may contain specific mismatches introduced by Cellecta.** We incorporate some mismatches in our library hairpins to improve stability and representation in a pooled-screening format. Although we have not observed any significant differences in efficacy between perfectly homologous shRNA sequences and those with 1-2 non-sequential mismatches, we typically use the same hairpin design for individual constructs to maintain sequence consistency with our functionally active library designs. **Note that this design may not apply in the case of customer-requested designs.**

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