

## Product Analysis Certificate

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



### Control Lentiviral shRNA Construct

**Shipment Contents:** Control Lentiviral shRNA Construct (Plasmid)  
shLuc Control in pRS112-U6-sh-UbiC-TagRFP-2A-Puro  
— Store at -20°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 plasmid shRNA construct can be packaged into VSV-G pseudotyped viral particles using most commercially-available second or third-generation packaging mixes or Cellecta's second-generation psPAX2/pMD2.G packaging plasmid mix:

Cat.# CPCP-K2A, Ready-to-use Lentiviral Packaging Plasmid Mix, 250 µg (for 25 x 10-cm plates)

The titer of packaged constructs can be 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:** -20°C

**Shelf Life:** 2 years from date of receipt

**Shipping Conditions:** Room Temperature, Blue Ice, or 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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Cat.# SHCTL-LUC-PX (in pRS112)



### Contents:

Catalog # (Reorder #)	Description
SHCTL-LUC-PX (SHCTL-LUC-PX- pRS112)	<b>Control Lentiviral shRNA Expression Construct</b> <b>shLuc</b> in pRS112-U6-sh-UbiC-TagRFP-2A-Puro RefSeq#: n/a, Gene ID: n/a  <b>25 µg, 0.5 µg/µl (50 µl × 1 tube)</b> Lot# 13080101; Store at -20°C
Target Sequence:	CGCTGAGTACTTCGAAATGTC
Insert (Hairpin) Seq.:	ACCGGCGCTGAGTACTTTGAAATGTTGTTAATATTCATAGCGACATTCGAAGTACTCAGCGTTT
Sequencing QC:	AGTTTGCAGTTTTAAATTATGTTTTAAATGGACTATCATATGCTTACCGTAACTTGAAAGTATTCGAT TTCTTGGCTTTATATATCTTGTGGAAAGGACGAAACACCGCGCTGAGTACTTTGAAATGTTGTTAATAT TCATAGCGACATTCGAAGTACTCAGCGTTTTTCGGACTGTAGAAGTCTGAACCTCTA
Sequencing Primer:	ATTAGTACAAAATACGTGACGTAGAA (U6-3)

### Design of Cellecta shRNA Constructs:

ACCGG-21mer (**sense** w/ mismatch(es)\*)-GTTAATATTCATAGC (**loop**)-21mer (**antisense**)-TTTT

\* For some constructs, 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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Cat.# SHCTL-LUC-PX (in pRS112)



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## Product Analysis Certificate

Control Lentiviral shRNA Construct  
shLuc in pRSI12-U6-sh-UbiC-TagRFP-2A-Puro  
Cat.# SHCTL-LUC-PX (in pRSI12)



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