Control Lentiviral Luciferase shRNA Construct

Shipment Contents:  Control Lentiviral Luc shRNA Construct in pRSI12 (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 65% of shRNA constructs. Results may vary between different cell types.

The Luciferase lentiviral shRNA construct expresses an shRNA sequence that targets Firefly Luciferase, and it has no significant homology to any mammalian transcript.

The titer of packaged pRSI12 constructs provided by Cellecta is functionally determined by transduction of 293T cells and FACS of RFP-positive cells.

Biosafety Level:  BSL-2

Storage:  -80°C

Shelf Life:  1 year from date of receipt

Shipping Conditions:  Dry Ice

Product Information (Cellecta Website):

Vector Info (Sequence, cassette, etc):  http://www.cellecta.com/resources/vectors/
Product Analysis Certificate
Control Lentiviral Luc shRNA Construct in pRS12 (Packaged)
Cat.# DVSHC-LUC-VS
Lot# 13081303

Contents:

<table>
<thead>
<tr>
<th>#</th>
<th>Catalog #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>DVSHC-LUC-VS</td>
<td>Control Lentiviral Luc shRNA Expression Construct (Packaged)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>pRSI12-U6-shLuc-UbiC-TagRFP-2A-Puro</td>
</tr>
<tr>
<td></td>
<td></td>
<td>RefSeq# n/a</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Packaged, &gt;1 x 10^7 TU:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.104 x 10^7 TU, 3.68 x 10^7 TU/ml (300 μl total: 100 μl x 3 vials)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lot# 13081303; Store at -80°C</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Target Sequence: CGCTGAGTACTTCCAAATGTC</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Insert (Hairpin) Seq.: ACCGGGCGTGAGTACTCTTGGAAATGGTTAATTTCTTAGCGACATTTCGAAGTACTCAGCGTTTT</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sequencing QC: AGTTTGCAGTTTTAAAAATTAGTTTAAAATGGCGCTACTTTACATATGCTTTACCTGAAACGGTGAAATGTTGTTAATTTCCGACATTTCGAAGTACTCAGCGTTTT</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sequencing Primer: CCTAGTACAAAATACGTGACGTAAG (U6-2)</td>
</tr>
</tbody>
</table>

Design of Cellecta shRNA Constructs:
ACCGG-21mer(sense+mismatch(es)*-GTTAATTTCTAGC(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.**
Terms and Conditions

Cellecta, Inc. Limited License

Cellecta grants the end user (the “Recipient”) of the Control Lentiviral shRNA Construct (the “Product”) a non-transferable, non-exclusive license to use the reagents for internal research use only as described in the enclosed protocols; in particular, research use only excludes and without limitation, resale, repackaging, or use for the making or selling of any commercial product or service without the written approval of Cellecta, Inc. -- separate licenses are available for non-research use or applications. The Product is not to be used for human diagnostics or included/used in any drug intended for human use. Care and attention should be exercised in handling the Product by following appropriate research laboratory practices.

Cellecta’s liability is expressly limited to replacement of Product or a refund limited to the actual purchase price. Cellecta’s liability does not extend to any damages arising from use or improper use of the Product, or losses associated with the use of additional materials or reagents. This limited warranty is the sole and exclusive warranty. Cellecta does not provide any other warranties of any kind, expressed or implied, including the merchantability or fitness of the Product for a particular purpose. Use of the Product for any use other than described expressly herein may be covered by patents or subject to rights other than those mentioned. Cellecta disclaims any and all responsibility for injury or damage that may be caused by the failure of the Recipient or any other person to use the Product in accordance with the terms and conditions outlined herein.

The Recipient may refuse these licenses by returning the enclosed Product unused. By keeping or using the enclosed Product, you agree to be bound by the terms of these licenses. The laws of the State of California shall govern the interpretation and enforcement of the terms of these Licenses.

Limited Use Licenses

The Recipient acknowledges that Product has been developed by Cellecta based on licenses from Third Parties and agrees with the Terms of Limited Use for the Recipient provided by the Third Parties:

Life Technologies Corporation End-User Label License for the use of Lentiviral Expression System:

“This product or service (based upon the Lentiviral Expression System) is sublicensed from Life Technologies Corporation under U.S. Patent Nos. 5,866,279; 5,834,266; 5,858,740; 5,994,136; 6,013,516; 6,051,427; 6,165,782; 6,218,187; 6,428,953; 6,924,144; 7,083,981 and 7,250,299 and corresponding patents and applications in other countries for internal research purposes only. Use of this technology for gene therapy applications or bioprocessing other than for nonhuman research use requires a license from GBP IP, LLC. Please contact GBP IP, LLC 537 Steamboat Road, Suite 200, Greenwich, CT 06830. Use of this technology to make or sell products or offer services for consideration in the research market requires a license from Life Technologies Corporation, 5791 Van Allen Way, Carlsbad, CA 92008.”

Evrogen IP JSC End-User Label License for the use of lentiviral shRNA constructs comprising TagRFP-encoded gene:

“This product is for internal non-commercial research use only. No rights are conveyed to modify or clone the gene encoding fluorescent protein contained in this product. The right to use this product specifically excludes the right to validate or screen compounds. For information on commercial licensing, contact Evrogen Licensing Department, email: license@evrogen.com”.

© 2013 Cellecta, Inc. All Rights Reserved.

Trademarks

CELLECTA is a registered trademark of Cellecta, Inc.