

## HuSH shRNA Plasmid, pRFP-C-RS

### pRFP-C-RS shRNA Cloning Plasmid Catalog # TR30014

#### Product Description:

- Plasmid vector for cloning shRNA expression cassettes
- Designed for long term gene silencing studies
- Chloramphenicol (34ug/ml) and Puromycin resistance markers for easy selection of transformed or transfected cells
- U6 polymerase III promoter for shRNA expression
- MMLV LTR sequences for packaging into retroviral particles
- EcoRI and HindIII sites convenient for shuttling existing HuSH cassettes

**Content:** Each vial contains 5 ug of dried and purified plasmid DNA.

**Storage and Stability:** The plasmid is stable for at least 1 yr at  $-20^{\circ}\text{C}$  from the date of shipment.

**Guarantee:** This product is guaranteed for the correct sequences and listed functions.

**Related Products:** Specific HuSH constructs are available at OriGene covering the full human, mouse and rat genomes.

#### Quality Control Assays

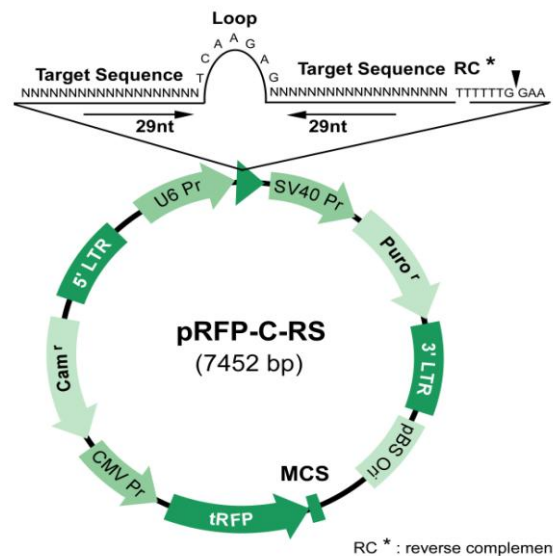
**DNA Quantitation:** The concentration of the purified plasmid was determined at  $\text{OD}_{260}$  by a UV spectrometer.

**DNA Sequence Analysis:** The final purified plasmid was sequenced to confirm its identity.

#### Functional Analysis:

1. Cloning: the pRFP-C-RS plasmid was digested with BamHI and HindIII and the digested fragment isolated. Multiple shRNA expression cassettes were cloned into this plasmid.
2. Inhibition of target gene: shRNA constructs cloned into pRFP-C-RS were verified for inhibition of target genes.
3. Stable cell lines: pRFP-C-RS was verified to generate stable cell lines using direct transfection.

Figure 1: Map of shRNA Cloning Vector pRFP-C-RS



#### Terms of Use

By opening the use the product, the purchaser agrees not to distribute, resell, modify for resale or use to manufacture commercial products without prior written approval from OriGene Technologies, Inc. If you do not agree with these conditions, please return product to OriGene for a full refund.



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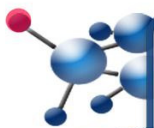
**Nucleotide sequence for OriGene's pRFP-C-RS shRNA-29 expression vector****(Updated April 2009)**

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GCCCTCACTCCTTCTCTAGGCGCCGGCCGGATCGGT

**Features for pRFP-C-RS vector:**

| Start | End  | Description   |
|-------|------|---|
| 1     | 6    | EcoRI   |
| 75    | 331  | U6 promoter   |
| 335   | 340  | BamHI   |
| 379   | 385  | HindIII   |
| 386   | 391  | Sall  |
| 413   | 604  | SV40 promoter   |
| 671   | 1270 | Puromycin-N-acetyl transferase sequence   |
| 1349  | 1942 | 3' LTR  |
| 2299  | 2918 | pBS ORI   |
| 2977  | 3563 | Poly A signal   |
| 3604  | 3667 | Multiple Cloning Site [PmeI (3604), NotI (3619, 3649), MluI (3630) AclI (3667)] |
| 3648  | 4380 | tRFP  |
| 4467  | 5192 | CMV Promoter  |
| 5263  | 5922 | CAM <sup>r</sup> Chloramphenicol Acetyltransferase                              |
| 6104  | 6574 | 5' LTR  |

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