

Materials List for:

# Large-scale Production of Recombinant RNAs on a Circular Scaffold Using a Viroid-derived System in *Escherichia coli*

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URL: <https://www.jove.com/video/58472>

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## Materials

| Name                                   | Company                     | Catalog Number | Comments                  |
|----------------------------------------|-----------------------------|----------------|---------------------------|
| Phusion High-Fidelity DNA polymerase   | Thermo Scientific           | F530S          |                           |
| <i>Bpi</i> I                           | Thermo Scientific           | ER1011         |                           |
| Agarose                                | Conda                       | 8010           | D1 low EEO                |
| Tris                                   | PanReac AppliChem           | A1086,1000     |                           |
| Acetic acid                            | PanReac AppliChem           | 131008.1214    |                           |
| EDTA                                   | Sigma-Aldrich               | E5134-500G     |                           |
| Ethidium bromide                       | PanReac AppliChem           | A1152,0025     | 1%                        |
| Zymoclean Gel DNA Recovery             | Zymo Research               | D4001          |                           |
| NanoDrop                               | ThermoFisher Scientific     | ND-3300        |                           |
| NEBuilder HiFi DNA Assembly Master Mix | New England BioLabs         | E2621S         |                           |
| DNA Clean & Concentrator               | Zymo Research               | D4003          |                           |
| Eporator                               | Eppendorf                   | 4309000019     |                           |
| <i>Escherichia coli</i> DH5α           | Invitrogen                  | 18265-017      |                           |
| Tryptone                               | Intron Biotechnology        | Ba2014         |                           |
| Yeast extract                          | Intron Biotechnology        | 48045          |                           |
| NaCl                                   | PanReac AppliChem           | 131659.1211    |                           |
| Agar                                   | Intron Biotechnology        | 25999          |                           |
| Ampicillin                             | PanReac AppliChem           | A0839,0010     |                           |
| X-gal                                  | Duchefa                     | X1402.1000     |                           |
| N,N-Dimethylformamide                  | PanReac AppliChem           | 131785.1611    |                           |
| NucloSpin Plasmid                      | Macherey-Nagel              | 22740588.250   |                           |
| <i>Escherichia coli</i> BL21(DE3)      | Novagen                     | 69387-3        |                           |
| <i>Escherichia coli</i> HT115(DE3)     |                             |                | Ref. Timmons et al., 2001 |
| Chloramphenicol                        | Duchefa                     | C 0113.0025    |                           |
| Glycerol                               | PanReac AppliChem           | 122329.1211    | 87%                       |
| KH <sub>2</sub> PO <sub>4</sub>        | PanReac AppliChem           | 131509.1210    |                           |
| K <sub>2</sub> HPO <sub>4</sub>        | PanReac AppliChem           | 122333.1211    |                           |
| HCl                                    | PanReac AppliChem           | 131020.1211    |                           |
| Phenol                                 | Scharlau                    | FE04791000     | 90%                       |
| Chloroform                             | PanReac AppliChem           | A3691,1000     |                           |
| Filtropur S 0.2                        | Sarstedt                    | 83.1826.001    |                           |
| HiTrap DEAE Sepharose FF column        | GE Healthcare Life Sciences | 17-5055-01     |                           |

|                                             |                             |             |    |
|---------------------------------------------|-----------------------------|-------------|----|
| ÄKTAprime plus liquid chromatography system | GE Healthcare Life Sciences | 11001313    |    |
| Acrylamide                                  | PanReac AppliChem           | A1089,1000  | 2K |
| <i>N,N'</i> -methylenebisacrylamide         | Sigma-Aldrich               | M7279-100G  |    |
| Urea                                        | PanReac AppliChem           | 146392.1211 |    |
| Boric acid                                  | PanReac AppliChem           | A2940,1000  |    |
| Formamide                                   | PanReac AppliChem           | A0937,2500  |    |
| Bromophenol blue                            | Sigma-Aldrich               | B8026-5G    |    |
| Xylene cyanol                               | Sigma-Aldrich               | X4126-10G   |    |
| <i>N,N'</i> -Bis(acryloyl)cystamine         | Sigma-Aldrich               | A4929-5G    |    |