

Materials List for:

# Synthesis of Infectious Bacteriophages in an *E. coli*-based Cell-free Expression System

Mark Rustad<sup>1</sup>, Allen Eastlund<sup>2</sup>, Ryan Marshall<sup>1</sup>, Paul Jardine<sup>2</sup>, Vincent Noireaux<sup>1</sup>

<sup>1</sup>School of Physics and Astronomy, University of Minnesota

<sup>2</sup>Department of Diagnostic and Biological Sciences and Institute for Molecular Virology, University of Minnesota

Correspondence to: Vincent Noireaux at [noireaux@umn.edu](mailto:noireaux@umn.edu)

URL: <https://www.jove.com/video/56144>

DOI: [doi:10.3791/56144](https://doi.org/10.3791/56144)

## Materials

| Name                      | Company                  | Catalog Number                           | Comments  |
|---------------------------|--------------------------|--|---|
| Ultracentrifugation tubes | Beckman Coulter          | 344057                                   |   |
| Conical tubes             | Falcon                   | 352070                                   |   |
| Gradient maker            | BioComp Gradient Master  | see Anal Biochem. 1985 Jul;148(1):254-9. |   |
| Syringe and Blunt Cannula | Monoject                 | 8881513918 and 888202017                 |   |
| Wide-bore pipette tips    | Fischerbrand             | 02-707-134                               |   |
| Plaque counter            | New Brunswick Scientific | Colony Counter Model C-110               |   |
| Culture tubes             | Fischerbrand             | 14-961-33                                |   |
| Cell-free system          | Mycroarray Inc           | Mytxtl                                   |   |
| BioComp Gradient Master   | BioComp Instruments      | Model 105ME                              |   |
| LB agar plate recipe      |                          |  | 25 g/L Luria-Bertani medium (LB Broth, Miller - Fisher BioReagents product number BP1426) and 15 g/L Bacto-Agar solid (Brenton, Dickenson and Company - product number 214010). |