

Materials List for:

Preparation, Purification, and Use of Fatty Acid-containing Liposomes

Lin Jin^{1,2}, Aaron E. Engelhart^{1,3}, Katarzyna P. Adamala^{1,3}, Jack W. Szostak¹

¹Howard Hughes Medical Institute and Department of Molecular Biology and Center for Computational and Integrative Biology, Massachusetts General Hospital

²Department of Biomedical Engineering, Boston University

³Department of Genetics, Cell Biology, and Development, University of Minnesota

*These authors contributed equally

Correspondence to: Jack W. Szostak at szostak@molbio.mgh.harvard.edu

URL: <https://www.jove.com/video/57324>

DOI: [doi:10.3791/57324](https://doi.org/10.3791/57324)

Materials

| Name | Company | Catalog Number | Comments |
|-----------------------------|---------------------------------|---------------------------------------|----------|
| sephorose 4B | SIGMA-ALDRICH INC | 4B200 | |
| calcein | SIGMA-ALDRICH INC | C0875-10G | |
| tris-HCl pH8.0 1M | LIFE TECHNOLOGIES CORP | AM9851 | |
| citric acid | SIGMA-ALDRICH INC | 251275-500G | |
| sodium hydroxide | SIGMA-ALDRICH INC | 71690-250G | |
| potassium hydroxide | Sigma | 30614 | |
| oleic acid | Nu-Chek | U-46-A | |
| glycerol monooleate | Nu-Chek | M-239 | |
| Liss Rhodamine-PE | LIFE TECHNOLOGIES CORP | L1392 | |
| magnesium chloride | Fisher/Thermo Fisher Scientific | AM9530G | |
| sequagel concentrate | National Diagnostics | EC-830 | |
| sequagel DILUENT | National Diagnostics | EC-840 | |
| 15% TBE-UREA GEL | Thermo Fisher Scientific | EC68852BOX | |
| urea | Sigma Aldrich | U6504-500G | |
| titon-100x | SIGMA-ALDRICH INC | T9284-100ML | |
| RNA primer | IDT | 5'Cy3-GCG UAG ACU GAC UGG | |
| RNA template | IDT | 5'-AAC CCC CCA GUC AGU CUA CGC | |
| hammerhead substrate strand | IDT | 5'Cy3-GCG CCG AAA CAC CGU GUC UCG AGC | |
| hammerhead ribozyme strand | IDT | 5'GGC UCG ACU GAU GAG GCG CG | |
| vesicle extruder set | AVANTI POLAR LIPIDS | 610000 | |
| fraction collector | Gilson, Inc. | 171041 | |
| 96-well plates | Fisher | NC9995941/675 | |
| plate reader | Molecular Devices | SpectraMax i3 | |
| confocal microscope | Nikon | Nikon A1R MP Confocal | |
| gel scanner | GE Healthcare Life Sciences | Typhoon 9410 scanner | |