

Materials List for:

Targeted Plasma Membrane Delivery of a Hydrophobic Cargo Encapsulated in a Liquid Crystal Nanoparticle Carrier

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Materials

| Name | Company | Catalog Number | Comments |
|---|---|------------------|--|
| 1-ethyl-3-(3-(dimethylamino)-propyl)carbodiimide hydrochloride (EDCA) | ThermoFisher | E2247 | |
| 3,3'-dioctadecyloxycarbocyanine perchlorate (DiO) | Sigma Aldrich | D4292-20MG | Hazardous; make stock solution in DMSO |
| Cholesterol poly(ethylene glycol) amine hydrochloride | Nanocs, Inc. | PG2-AMCS-2k | |
| Countess automated cell counter | ThermoFisher | C10227 | |
| Dioctadecyl-3,3,3',3'-tetramethylindocarbocyanine perchlorate (DiI) | Sigma Aldrich | 468495-100MG | Hazardous; make stock solution in DMSO |
| Dulbecco's Modified Eagle's Medium (DMEM) | ThermoFisher | 21063045 | Warm in 37 °C before use |
| Dulbecco's Phosphate Buffered Saline (DPBS) | ThermoFisher | 14040182 | Warm in 37 °C before use |
| Dynamic light scattering instrument | ZetaSizer NanoSeries (Malvern Instruments Ltd., Worcestershire, UK) | | |
| Fibronectin Bovine Protein, Plasma | ThermoFisher | 33010018 | Make stock solution 1 mg/ml using DPBS. Use 20-30 µg/ml for coating MetTek dish, 2 hr at 37 °C |
| Formaldehyde (16%, W/V) | ThermoFisher | 28906 | Hazardous; dilute to 4% using DPBS |
| Human embryonic kidney cells (HEK 293T/17) | American Type Culture Collection | ATCC® CRL-11268™ | |
| Live cell imaging solution (LCIS) | ThermoFisher | A14291DJ | Warm in 37 °C before use |
| MatTek 14 mm # 1.0 coverglass insert cell culture dish | MatTek corporation | P35G-1.0-14-C | |
| Modified Eagle Medium (DMEM) containing 25 mM HEPES | ThermoFisher | 21063045 | Warm in 37 °C before use |
| N-hydroxysulfosuccinimide sodium salt (NHSS) | ThermoFisher | 24510 | |
| Nikon A1si spectral confocal microscope | Nikon Instruments | | |
| Trypan Blue Stain (0.4%) | ThermoFisher | T10282 | mix as a 50% to the cell suspension before counting the cells |
| Zeta potential instrument | ZetaSizer NanoSeries (Malvern Instruments Ltd., Worcestershire, UK) | | |

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| Ultrasonic Processor | Sonics and Materials Inc | GEX 600-5 | |
| Mini Centrifuge | Benchmark | Mini-fuge-04477 | |
| PD-10 Sephadex™ G-25 Medium | GE Healthcare | 17-0851-01 | |
| Bio-Rad ChemiDoc XRS Imaging System | Bio-RAD | 76S/07434 | |
| Trypsin-EDTA (0.25%), phenol red | ThermoFisher | 25200056 | |