

Materials List for

Construction of Out-of-Equilibrium Metabolic Networks in Nano- and Micrometer-Sized Vesicles

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Materials

Name	Company	Catalog Number	Comments
Agarose	Sigma Aldrich	A9414-25g	
Amicon cut-off filter	Sigma Aldrich	Milipore centrifugal filter units Amicon Ultra	
BioBeads	BioRad	152-3920	
CHCl ₃	Macron Fine Chemicals	MFCD00000826	
D(+)-Glucose	Formedium	-	
D(+)-Sucrose	Formedium	-	
DDM	Glycon	D97002 -C	
Diethyl Ether	Biosolve	52805	
DMSO	Sigma-Aldrich	276855-100ml	
DOPC	Avanti	850375P-1g	
DOPE	Avanti	850725P-1g	
DOPG	Avanti	840475P-1g	
DTT	Formedium	DTT005	
EtOH	J.T.Baker Avantor	MFCD00003568	
Extruder	Avestin Inc	LF-1	
Fluorimeter	Jasco	Spectrofluorometer FP-8300	
Glycerol	BOOM	51171608	
Gravity flow column	Bio-Rad	732-1010	
Hamilton syringe 100 µL	Hamilton	7656-01	
Hamilton syringe 1000 µL	Hamilton	81320	
Handheld LCP dispenser	Art Robbins Instruments	620-411-00	
Handheld Sonicator	Hielscher Ultrasound Technology	UP50H	
HCl	BOOM	x76021889.1000	
Imidazole	Roth	X998.4-250g	
K ₂ HPO ₄	Supelco	1.05099.1000	
KCl	BOOM	76028270.1	

KH ₂ PO ₄	Supelco	1.04873.1000	
Kimwipe	Kimtech Science	7552	
Large Falcon tube centrifuge	Eppendorf	Centrifuge 5810 R	
L-Arginine	Sigma-Aldrich	A5006-100G	
Light microscope	Leica	DM LS2	
L-Ornithine	Roth	T204.1	
LSM Laser Scanning Confocal Microscope	Zeiss	LSM 710 ConfoCor 3	
MgCl ₂	Sigma-Aldrich	M2670-1KG	
Microfluidic chip	Homemade	PDMS based	DOI: https://doi.org/10.1039/C8LC01275J
Na-ADP	Sigma-Aldrich	A2754-1G	
NaCl	Supelco	1.06404.1000	
Nanodrop Spectrometer	Isogen Life Science	ND-1000 spectrophotometer NanoDrop	
NaOH	Supelco	1.06498.1000	
Needles for GUVs	Henke-Ject	14-14575	27 G x 3/4" 0.4 x 20 mm
Needles for microfluidics	Henke-Ject	14-15538	18 G x 1 1/2" 1.2 x 40 mm
Ni ₂ ⁺ Sepharose	Cytiva	17526802	
Nigericin	Sigma-Aldrich	N7143-5MG	
Nutator	VWR	83007-210	
Osmolality meter	Gonotec Salmenkipp	Osmomat 3000 basic freezing point osmometer	
Plasmacleaner	Plasma Etch	PE-Avenger	
Polycarbonate filter	Cytiva Whatman	Nuclepor Track-Etch Membrane Product: 10417104	0.4 µm
Polycarbonate ultracentrifuge tube	Beckman Coulter	355647	
Pyranine	Acros Organics	H1529-1G	
Quartz cuvette (black)	Hellma Analytics	108B-10-40	
Sephadex G-75 resin	GE Healthcare	17-0050-01	
Sonicator	Sonics Sonics & Materials INC	Sonics vibra cell	
Syringe filter	Sarstedt	Filtropur S plus 0.2	0.2 µm
Syringe pump	Harvard Apparatus	A-42467	
Tabletop centrifuge	Eppendorf	centrifuge 5418	
Teflon spacer	Homemade	Teflon based	45 x 26 x 1.5 or 45 x 26 x 3 or 20 x 20 x 3 mm
Tris	PanReac AppliChem	A1086.1000	
Triton X-100	Sigma Aldrich	T8787-100 ml	
Ultracentrifuge	Beckman Coulter	Optima Max-E	
UV lamp	Spectroline	ENB-280C/FE	
UV/VIS Spectrometer	Jasco	V730 spectrophotometer	
Valinomycin	Sigma-Aldrich	V0627-10MG	
Widefield fluorescence microscope	Zeiss	AxioObserver	
β-Casein	Sigma Aldrich	C5890-500g	