

Materials List for:

Rapid, Scalable Assembly and Loading of Bioactive Proteins and Immunostimulants into Diverse Synthetic Nanocarriers Via Flash Nanoprecipitation

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Materials

Name	Company	Catalog Number	Comments
CanaKit Raspberry Pi 3 Ultimate Starter Kit - 32 GB Edition	CanaKit	UPC 682710991511	
Linear Bearing Platform (Small) - 8mm Diameter	Adafruit	1179	
Linear Motion 8 mm Shaft, 330 mm Length, Chrome Plated, Case Hardened, Metric	VXB	kit11868	
Linear Rail Shaft Guide/Support - 8 mm Diameter	Adafruit	1182	
Manual-Position Precision Slide 4.5" Stroke, 15 lb load capacity	McMaster-Carr	5236A16	
MTPM-P10-1JK43 Iron Horse DC motor	Iron Horse	MTPM-P10-1JK43	
Official Raspberry Pi Foundation 7" Touchscreen LCD Display	Raspberry Pi	B0153R2A9I (ASIN)	
PicoBorg Reverse - Advanced motor control for Raspberry Pi	PiBorg	BURN-0011	
Pololu Carrier with Sharp GP2Y0D810Z0F Digital Distance Sensor 10cm	Pololu	1134	
Ruland PSR16-5-4-A Set Screw Beam Coupling, Polished Aluminum, Inch, 5/16" Bore A Diameter, 1/4" Bore B Diameter, 1" OD, 1-1/4" Length, 44 lb-in Nominal Torque	Ruland	PSR16-5-4-A	
Polyethylene glycol monomethyl ether	Sigma Aldrich	202495	
Methanesulfonyl chloride	Sigma Aldrich	471259	
Toluene	Sigma Aldrich	179418	
Toluene, Anhydrous	Sigma Aldrich	244511	
Triethylamine	Sigma Aldrich	T0886	
Celite 545 (Diatomaceous Earth)	Sigma Aldrich	419931	
Dichloromethane	Sigma Aldrich	320269	
Diethyl ether	Sigma Aldrich	296082	
N,N-Dimethylformamide, anhydrous	Sigma Aldrich	227056	
Potassium carbonate	Sigma Aldrich	791776	

Thioacetic acid	Sigma Aldrich	T30805	
Tetrahydrofuran	Sigma Aldrich	360589	
Aluminum oxide, neutral, activated, Brockmann I	Sigma Aldrich	199974	
Sodium methoxide solution, 0.5 M in methanol	Sigma Aldrich	403067	
Propylene sulfide	Sigma Aldrich	P53209	
Acetic acid	Sigma Aldrich	A6283	
Methanol	Sigma Aldrich	320390	
Sodium hydroxide solution 1.0 N	Sigma Aldrich	S2770	
Endotoxin-free water	GE Healthcare Life Sciences	SH30529.01	
Paper pH strips	Fisher Scientific	13-640-508	
Endotoxin-free Dulbecco's PBS	Sigma Aldrich	TMS-012	
Borosilicate glass scintillation vials	Fisher Scientific	03-337-4	
1 mL all-plastic syringe	Thermo Scientific	S75101	
Sepharose CL-6B	Sigma Aldrich	CL6B200	
Liquid chromatography column	Sigma Aldrich	C4169	
CIJ mixer, HDPE	Custom		
Triton X-100	Sigma Aldrich	X100	
Hydrogen peroxide solution	Sigma Aldrich	216763	
HEK-Blue hTLR4	InvivoGen	hkb-htlr4	
RAW-Blue Cells	InvivoGen	raw-sp	
QUANTI-Blue	InvivoGen	rep-qb1	
PYROGENT Gel Clot LAL Assays	Lonza	N183-125	