

Materials List for:

Engineering Molecular Recognition with Bio-mimetic Polymers on Single Walled Carbon Nanotubes

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Materials

Name	Company	Catalog Number	Comments
sodium chloride	Fisher Scientific	S271-1	
sodium dodecyl sulfate	Sigma Aldrich	L6026	
sodium cholate hydrate	Sigma Aldrich	C6445	
tris base (Trizma base)	Sigma Aldrich	93362	
hydrochloric acid	Fisher Scientific	A144-212	
Amine-PEG-amine, NH ₂ -PEG-NH ₂	Nanocs Inc	PG2-AM-5k	
rhodamine B isothiocyanate	Sigma Aldrich	283924	
fluorescein isothiocyanate	Sigma Aldrich	F7250	
dichloromethane	Sigma Aldrich	676853	
dimethylformamide	Sigma Aldrich	D4551	
N,N-diisopropylethylamine	Sigma Aldrich	D125806	
diethyl ether	Sigma Aldrich	673811	
Tris(2-carboxyethyl)phosphine hydrochloride	Sigma Aldrich	C4706	
5'-thiol-modified DNA	Integrated DNA Technologies		
methoxypolyethylene glycol maleimide	Sigma Aldrich	63187	
100 kDa spin filters	Millipore		
HiPCO Super purified single walled carbon nanotubes	Integris	HiPco SuperPurified	
phosphate buffered saline	Sigma Aldrich	P5493	
anti static gun	Milty	Milty Zerostat 3	
centrifuge	Eppendorf	5415 D	
ultra sonicator	Cole Parmer	CV18	
dialysis cassettes	Thermo scientific	Slide-A-Lyzer G2 87722	
BSA-biotin	Thermo scientific	29130	
Neutravidin protein	Thermo scientific	31000	
(3-Aminopropyl)triethoxysilane (APTES)	Sigma Aldrich	440140	
inverted microscope	Zeiss	Axio Observer.Z1	
kinematic mirrors	ThorLabs	KM200-E03	
periscope	ThorLabs	RS99	
immersion oil	Zeiss	Immersol 518f	
100X objective	Zeiss	Plan-apochromat 100X oil, 1.4NA, PH3, 420791-9911-000	

20X objective	Zeiss	N-Achroplan 0.45 NA, 420953-9901-000	
cover glass	Healthrow Scientific	HS159879H	
dopamine hydrochloride	Sigma Aldrich	H8502	
infrared 2D array camera	Princeton Instruments	NIRvana	
infrared 1D sensor array	Princeton Instruments	PyLoN IR	
nIR spectrograph	Princeton Instruments	SCT-320	
planoconvex lens	ThorLabs	LA1384	
well plates (glass bottom)	Corning	4580	