

Materials List for:

Predicting Gene Silencing Through the Spatiotemporal Control of siRNA Release from Photo-responsive Polymeric Nanocarriers

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Materials

Name	Company	Catalog Number	Comments
siRNA	Sigma-Aldrich	SIC001	non-targeted, universal negative control
mPEG-b-P(APNBMA)	synthesized in our lab	N/A	photo-responsive polymer
HEPES	Fisher Scientific	BP310-100	
sodium dodecyl sulfate	Sigma-Aldrich	436143	
rubber gasket	McMaster-Carr	3788T21	0.5 mL thick
UV laser	Excelitas Technologies	Omniculture S2000	collimating lens and 365 nm filter used
agarose	Fisher Scientific	BP160-100	
ethidium bromide	Fisher Scientific	BP1302-10	
siRNA labelled with Dy547	GE Healthcare Dharmacon, Inc.	custom order	fluorophore conjugated to 5' end of sense strand
microscope slide	Fisher Scientific	12-550-A3	pre-cleaned glass
Secure-Seal Spacer	Life Technologies	S24735	double-sided adhesive
LSM 780	Carl Zeiss	N/A	confocal microscope
ZEN 2010	Carl Zeiss	N/A	FCS analysis software
MATLAB	MathWorks	N/A	programming language
NIH/3T3 cells	ATCC	ATCC CRL-1658	
DMEM	Mediatech	10-013-CV	growth media
fetal bovine serum	Mediatech	35-011-CV	heat-inactivated
penicillin-streptomycin	Mediatech	30-002-CI	
6-well plates	Fisher Scientific	08-772-1B	
Opti-MEM	Life Technologies	11058021	transfection media