

Materials List for

# Phage-Mediated Genetic Manipulation of the Lyme Disease Spirochete *Borrelia burgdorferi*

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jove.com/video/64408

## Materials

Name	Company	Catalog Number	Comments
1 L filter units (PES, 0.22 µm pore size)	Millipore Sigma	S2GPU10RE	
12 mm x 75 mm tube (dual position cap) (polypropylene)	USA Scientific	1450-0810	holds 4 mL with low void volume (for induction)
15 mL conical centrifuge tubes (polypropylene)	USA Scientific	5618-8271	
1-methyl-3-nitroso-nitroguanidine (MNNG)	Millipore Sigma		<b>CAUTION:</b> potential carcinogen; no longer readily available, have not tested offered substitute
5.75" Pasteur Pipettes (cotton-plugged/borosilicate glass/non-sterile)	Thermo Fisher Scientific	13-678-8A	autoclave prior to use
50 mL conical centrifuge tubes (polypropylene)	USA Scientific	1500-1211	
Absolute ethanol			
Agarose LE	Dot Scientific inc.	AGLE-500	
Bacto Neopeptone	Gibco	DF0119-17-9	
Bacto TC Yeastolate	Gibco	255772	
Bovine serum albumin (serum replacement grade)	Gemini Bio-Products	700-104P	
Chloroform (for molecular biology)	Thermo Fisher Scientific	BP1145-1	<b>CAUTION:</b> volatile organic; use only in a chemical fume hood
CMRL-1066 w/o L-Glutamine (powder)	US Biological	C5900-01	cell culture grade
Erythromycin	Research Products International Corp	E57000-25.0	
Gentamicin reagent solution	Gibco	15750-060	
Glucose (Dextrose Anhydrous)	Thermo Fisher Scientific	BP350-500	
HEPES	Thermo Fisher Scientific	BP310-500	
Kanamycin sulfate	Thermo Fisher Scientific	25389-94-0	
Millex-GS (0.22 µm pore size)	Millipore Sigma	SLGSM33SS	to filter sterilize antibiotics and other small volume solutions

Mitomycin C	Thermo Fisher Scientific	BP25312	<b>CAUTION:</b> potential carcinogen; use only in a chemical fume hood
N-acetyl-D-glucosamine	MP Biomedicals, LLC	100068	
Oligonucleotides (primers for PCR)	IDT DNA		
OmniPrep (total genomic extraction kit)	G Biosciences	786-136	
Petri Dish (100 mm × 15 mm)	Thermo Fisher Scientific	FB0875712	
Petroff-Hausser counting chamber	Hausser scientific	HS-3900	
Petroff-Hausser counting chamber cover glass	Hausser scientific	HS-5051	
Polyethylene glycol 8000 (PEG)	Thermo Fisher Scientific	BP233-1	
Rabbit serum non-sterile trace-hemolyzed young (NRS)	Pel-Freez Biologicals	31119-3	heat inactivate as per manufacturer's instructions
Semi-micro UV transparent cuvettes	USA Scientific	9750-9150	
Sodium bicarbonate	Thermo Fisher Scientific	BP328-500	
Sodium chloride	Thermo Fisher Scientific	BP358-1	
Sodium pyruvate	Millipore Sigma	P8674-25G	
Spectronic Genesys 5	Thermo Fisher Scientific		
Streptomycin sulfate solution	Millipore Sigma	S6501-50G	
Trisodium citrate dihydrate	Millipore Sigma	S1804-500G	sodium citrate for BSK