

Materials List for:

# Rescue of Recombinant Zika Virus from a Bacterial Artificial Chromosome cDNA Clone

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URL: <https://www.jove.com/video/59537>

DOI: [doi:10.3791/59537](https://doi.org/10.3791/59537)

## Materials

Name	Company	Catalog Number	Comments
<b>1. Molecular Biology Reagents</b>			
Afe I	New England BioLabs	R0652S	10,000 Units/mL
AmpliTaq DNA Polymerase	ThermoFisher Scientific (Applied Biosystems)	N8080161	5,000 Units/mL
ApaI	New England BioLabs	R0507S	10,000 units/mL
Asc I	New England BioLabs	R0558S	10,000 Units/mL
BamH I	New England BioLabs	R0136S	10,000 Units/mL
BstB I	New England BioLabs	R0519S	20,000 Units/mL
Chloramphenicol	Sigma-Aldrich	C0378	
ElectroMAX DH10B Cells	ThermoFisher Scientific (Invitrogen)	18290015	Electocompetent DH10B cells
Electroporation Cuvettes, 0.2 cm	Bio-Rad	165-2086	
Ethanol	Merck	100983	Flamable
Isopropanol	Merck	109634	Flamable
Large-Construct Kit (10)	QIAGEN	12462	For high-purity BAC preparation
LB Broth	ThermoFisher Scientific (Invitrogen)	12780029	Can be homemade as well
LB with Agar	ThermoFisher Scientific (Invitrogen)	22700041	Can be homemade as well
Methanol	Merck	106009	Flamable
Mlu I	New England BioLabs	R0198S	10,000 Units/mL
Oligonucleotides	IDT	N/A	
Plasmid pBeloBAC11	New England BioLabs	ER2420S (E4154S)	
Plasmid Midi Kit (25)	QIAGEN	12143	For midle-scale preparation of BAC plasmids
Pml I	New England BioLabs	R0532S	20,000 Units/mL
Polypropylene tubes (10 mL)	DeltaLab	175724	Other commercial sources are acceptable
QIAEX II Gel Extraction Kit (150)	QIAGEN	20021	Gel-clean-up kit optimized for DNA fragments larger than 10 kb
Shrimp Alkaline Phosphatase (rSAP)	New England BioLabs	M0371S	1,000 Units/mL
SOC Medium	ThermoFisher Scientific (Invitrogen)	15544034	Can be homemade as well
Synthesis of cDNA fragments	Bio Basic	N/A	
T4 DNA Ligase	Sigma-Aldrich (Roche)	10481220001	1,000 Units/mL

<b>2. Cell Culture Reagents</b>			
6-Well Plates	ThermoFisher Scientific (Nunc)	140675	
12-Well Plates	ThermoFisher Scientific (Nunc)	150628	
24-Well Plates	ThermoFisher Scientific (Nunc)	142485	
Agar Noble	VWR	214230	
Alexa Fluor 488 Conjugate anti-mouse secondary antibody	Varies	N/A	
Biotinylated Anti-Mouse Secondary Antibody	Varies	N/A	
Cell Culture Dishes (100 mm x 21 mm)	ThermoFisher Scientific (Nunc)	172931	
Conical Tubes (15 mL)	VWR	525-0150	
Conical Tubes (50 mL)	VWR	525-0155	
Crystal Violet	Sigma-Aldrich	C6158	
DAPI	Sigma-Aldrich	D9542	Toxic and carcinogenic
DEAE-Dextran	Sigma-Aldrich	D9885	
DMEM	ThermoFisher Scientific (Gibco)	11995065	
Fetal Bovine Serum (FBS)	ThermoFisher Scientific (HyClone)	SV30160.03	
Formaldehyde	Sigma-Aldrich	F8775	Toxic and carcinogenic
L-Glutamine	ThermoFisher Scientific (Gibco)	25030081	
Lipofectamine 2000	ThermoFisher Scientific (Invitrogen)	11668019	Transfection reagent
Nonessential amino acids	ThermoFisher Scientific (Gibco)	11140035	
Opti-MEM I Reduced Serum Medium	ThermoFisher Scientific (Gibco)	31985070	Transfection medium
Pan-flavivirus E protein mAb 4G2	BEI Resources	NR-50327	
Paraformaldehyde	Electron Microscopy Sciences	15710-S	Toxic and carcinogenic
PBS	ThermoFisher Scientific (Gibco)	14190144	
Penicillin/Streptomycin	ThermoFisher Scientific (Gibco)	15140122	
ProLong Gold Antifade Reagent	ThermoFisher Scientific (Invitrogen)	P10144	
Triton-X-100	Sigma-Aldrich	T8787	
Vectastain ABC Kit	Vector Laboratories Inc	PK-4010	Avidin/biotin-based peroxidase kit
Vero Cells	ATCC	CCL-81	
ZIKV E Protein mAb 1176-56	BioFront Technologies	BF-1176-56	
<b>3. Equipment</b>			
Agarose Gel Electrophoresis System	Bio-Rad	1704468	Other commercial sources are acceptable
Class II Biosafety CO <sub>2</sub> Cabinet	Varies	N/A	Other commercial sources are acceptable
Desktop Refrigerated Centrifuge	Varies	N/A	
Fluorescence Microscope	Varies	N/A	
High-speed Refrigerated Centrifuge	Varies	N/A	
MicroPulser Electroporator	Bio-Rad	1652100	Other machines are acceptable
SimpliAmp Thermal Cycler	ThermoFisher Scientific (Applied Biosystems)	A24811	Other machines are acceptable
Vortexer	Varies	N/A	