

Materials List for:

Bacterial Artificial Chromosomes: A Functional Genomics Tool for the Study of Positive-strand RNA Viruses

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Materials

Name	Company	Catalog Number	Comments
1. Molecular Cloning			
2xYT Broth	Sigma-Aldrich	Y2377	
[³ H]UTP	PerkinElmer	NET380250UC	Radioactive
50 ml Tube	Thermo Scientific (Nalgene)	3114-0050	
250 ml Bottle	Beckman Coulter	356011	
Agarose	Lonza	50004	
Agarose (Low Melting Point)	Life Technologies (Invitrogen)	16520-100	
Aval	New England BioLabs	R0152S	
AvrII	New England BioLabs	R0174S	
BamHI	New England BioLabs	R0136S	
BsiWI	New England BioLabs	R0553S	
BsrGI	New England BioLabs	R0575S	
Butanol	Fisher Scientific	A399-1	
Cesium Chloride	Fisher Scientific	BP1595-1	
Chloramphenicol	Sigma-Aldrich	C0378	
Chloroform	Sigma-Aldrich	C2432	Carcinogenic
DE-81 Filter Paper	GE Healthcare Life Sciences	3658-023	
dNTP mix	Life Technologies (Invitrogen)	18427-088	
<i>E. coli</i> DH10B	Life Technologies (Invitrogen)	18297-010	
EDTA	Sigma-Aldrich	E5134	
Ethanol	Sigma-Aldrich	E7023	
Ethidium Bromide	Sigma-Aldrich	E7637	Toxic and highly mutagenic
Filter Column (Plasmid Maxiprep Kit)	Life Technologies (Invitrogen)	K2100-26	
Glacial Acetic Acid	Sigma-Aldrich	A6283	Irritating
Glucose	Sigma-Aldrich	G5400	
Glycogen	Roche	10901393001	
High-fidelity DNA Polymerase	New England BioLabs	M0491S	
Isoamyl Alcohol	Sigma-Aldrich	I9392	Flammable
Isopropanol	Amresco	0918	Flammable
LB Broth	Life Technologies (Invitrogen)	12795-027	
Lithium Chloride	Sigma-Aldrich	L9650	
Lysozyme	Amresco	0663	
Magnesium Chloride	Sigma-Aldrich	M8266	

M-MLV Reverse Transcriptase	Life Technologies (Invitrogen)	18080-044	
Mung Bean Nuclease	New England BioLabs	M0250S	
Needle (18G, 20G)	BD	305196, 305175	Biohazardous (Sharps waste)
NotI	New England BioLabs	R0189S	
Oligonucleotide	Integrated DNA Technologies	Custom Oligonucleotide Synthesis	
Pacl	New England BioLabs	R0547S	
pBeloBAC11	New England BioLabs	ER2420S (E4154S)	
Phenol (Buffer-Saturated)	Life Technologies (Invitrogen)	15513-039	Toxic and highly corrosive
Phenol:Chloroform:Isoamyl Alcohol	Life Technologies (Invitrogen)	15593-031	Toxic and highly corrosive
Phenol:Guanidine Isothiocyanate	Life Technologies (Ambion)	10296-010	Toxic, corrosive, and irritating
Pme I	New England BioLabs	R0560S	
Potassium Acetate	Amresco	0698	
RNase Inhibitor	Life Technologies (Invitrogen)	10777-019	
rNTP Set	GE Healthcare Life Sciences	27-2025-01	
Sealable Polypropylene Tube (16 × 76 mm)	Beckman Coulter	342413	
SfiI	New England BioLabs	R0123S	
Sma I	New England BioLabs	R0141S	
Sodium Acetate	Sigma-Aldrich	S2889	
Sodium Dodecyl Sulfate	Amresco	0227	
Sodium Hydroxide	Sigma-Aldrich	S5881	
SP6 RNA Polymerase	New England BioLabs	M0207S	
Spin Column (Plasmid Miniprep Kit)	Life Technologies (Invitrogen)	K2100-11	
Syringe	HSW NORM-JECT	4200.000V0	
T4 DNA Ligase	New England BioLabs	M0202S	
Tris	Amresco	0826	
tRNA (yeast)	Life Technologies (Invitrogen)	15401-011	
XbaI	New England BioLabs	R0145S	
Name	Company	Catalog Number	Comments
2. Cell Culture			
Alpha Minimal Essential Medium	Life Technologies (Gibco)	12561-049	
Conical Tube (50 mL)	VWR	21008-242	
Crystal Violet	Sigma-Aldrich	C0775	
Culture Dish (150 mm)	TPP	93150	
Cuvette (2-mm Gap)	Harvard Apparatus	450125	
Fetal Bovine Serum	Life Technologies (Gibco)	16000-044	
Formaldehyde	Sigma-Aldrich	F1635	Toxic and carcinogenic
Glutamine	Life Technologies (Gibco)	25030-081	
Minimal Essential Medium	Life Technologies (Gibco)	61100-061	
Penicillin/Streptomycin	Life Technologies (Gibco)	15070-063	
Potassium Chloride	Sigma-Aldrich	P3911	
Potassium Phosphate Monobasic	Sigma-Aldrich	P9791	
Six-Well Plate	TPP	92006	
Sodium Chloride	Sigma-Aldrich	S3014	
Sodium Phosphate Dibasic	Sigma-Aldrich	S3264	

Trypsin-EDTA (0.25%)	Life Technologies (Gibco)	25200-056	
Vitamins	Sigma-Aldrich	M6895	
Name	Company	Catalog Number	Comments
3. Equipment			
Agarose Gel Electrophoresis System	Mupid	MPDEXU-01	
CO ₂ Incubator	Thermo Scientific	Heracell 150i	
Desktop Centrifuge	Thermo Scientific	ST16R	
Electroporator	Harvard Apparatus	ECM 830	
Longwave Ultraviolet Lamps (Handheld)	UVP	UVGL-58	
Tabletop Centrifuge	Beckman Coulter	368826	
Thermocycler	Life Technologies (Applied Biosystems)	GeneAmp PCR System 9700	
Vortexer	Scientific Industries	G-560	
Water Bath	Jeio Tech	WB-10E	