

Materials List for:

# Producing Gene Deletions in *Escherichia coli* by P1 Transduction with Excisable Antibiotic Resistance Cassettes

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## Materials

Name	Company	Catalog Number	Comments
<b>Strains</b>			
<i>E. coli</i> BW25113	NIG	ME6092	Wild-type strain of Keio collection
<i>E. coli</i> BL21(DE3)	Merck	69450-3	Expression strain
<i>E. coli</i> BL21DABCF	Addgene	102270	Derived from BL21(DE3)
<i>E. coli</i> JW4179	NIG	JW4179-KC	<i>tamA</i> deletion mutant
P1 <i>vir</i>	NIG	HR16	Generally transducing bacteriophage
<b>Plasmids</b>			
pCP20	CGSC	14177	conditionally replicating plasmid with FLP
pASK-IBA2	IBA GmbH	2-1301-000	expression vector
pEibD10	N/A	N/A	for production of EibD; plasmid available on request
pET22b+	Merck	69744-3	expression vector
pIBA2-YadA	N/A	N/A	for production of YadA; plasmid available on request
<b>Chemicals</b>			
Acetic acid	ThermoFisher	33209	
Agar	BD Bacto	214010	
Agarose	Lonza	50004	
Ampicillin	Applichem	A0839	
Anhydrotetracycline	Abcam	ab145350	
anti-collagen type I antibody COL-1	Sigma	C2456	
Bovine collagen type I	Sigma	C9791	
Calcium chloride	Merck	102382	
Chloroform	Merck	102445	
Di-sodium hydrogen phosphate	VWR	28029	
DNA dye	Thermo	S33102	
DNA molecular size marker	New England BioLabs	N3232S	
DNase I	Sigma	DN25	
dNTP mix	New England Biolabs	N0447	
ECL HRP substrate	Advansta	K-12045	
EDTA	Applichem	A2937	
Glycerol	VWR	24388	
goat anti-mouse IgG-HRP	Santa Cruz	sc-2005	

goat anti-rabbit IgG-HRP	Agrisera	AS10668	
HEPES	VWR	30487	
Isopropyl thiogalactoside	VWR	43714	
Kanamycin	Applchem	A1493	
Lysozyme	Applchem	A4972	
Magnesium chloride	VWR	25108	
Manganese chloride	Sigma	221279	
<i>N</i> -lauroyl sarcosine	Sigma	L9150	
Skim milk powder	Sigma	70166	
Sodium chloride	VWR	27808	
<i>tamA</i> forward primer	Invitrogen	N/A	Sequence 5'-GAAAAAAGG ATATTCAGGAGAAAATGTG-3'
<i>tamA</i> reverse primer	Invitrogen	N/A	Sequence 5'-TCATAATT CTGGCCCCAGACC-3'
Taq DNA polymerase	New England Biolabs	M0267	
Tri-sodium citrate	Merck	106448	
Tryptone	VWR	84610	
Tween20	Sigma	P1379	
Yeast extract	Merck	103753	
<b>Equipment</b>			
Agarose gel electrophoresis chamber	Hoefler	SUB13	
Bead beater	Thermo	FP120A-115	
CCD camera	Kodak	4000R	
Electroporation cuvettes	Bio-Rad	165-2089	
Electroporation unit	Bio-Rad	1652100	
Gel imager	Nippon Genetics	GP-03LED	
Incubating shaker	Infors HT	Minitron	
Incubator	VWR	390-0482	
Microcentrifuge	Eppendorf	5415D	
Microwave oven	Samsung	CM1099A	
PCR machine	Biometra	Tpersonal	
PCR strips	Axygen	PCR-0208-CP-C	
pH meter	Hanna Instruments	HI2211-01	
PVDF membrane	ThermoFisher	88518	
SDS-PAG electrophoresis chamber	ThermoFisher	A25977	
Tabletop centrifuge	Beckman Coulter	B06322	
Vortex mixer	Scientific Industries	SI-0236	
Water bath	GFL	D3006	
Wet transfer unit	Hoefler	TE22	