

Materials List for

Agrobacterium tumefaciens-Mediated Genetic Engineering of Green Microalgae, *Chlorella vulgaris*

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jove.com/video/65382

Materials

Name	Company	Catalog Number	Comments
1 Kb Plus DNA ladder	FroggaBio	DM015	
Acetosyringone	Fisher Scientific	D26665G	
<i>Agrobacterium tumefaciens</i>	Gold Biotechnologies	Strain: AGL-1; Gift from Prof. Paul Hooykaas	Genotype: C58 RecA (Rif ^R /Carb ^R) pTiBo542DT-DNA
Biotin	Enzo Life Sciences	89151-400	
CaCl ₂ ·2H ₂ O	VWR	BDH9224-1KG	
Cefotaxime	AK Scientific	J90010	
<i>Chlorella vulgaris</i>	University of Texas at Austin Culture Collection of Algae	Strain: UTEX 395	Wildtype strain
CoCl ₂ ·6H ₂ O	Sigma Aldrich	C8661-25G	
CuSO ₄ ·5H ₂ O	EMD Millipore	CX2185-1	
FeCl ₃ ·6H ₂ O	VWR	BDH9234-500G	
Gene Pulser Xcell Electroporator	Bio-Rad	1652662	Main unit equipped with PC module.
GeneJET Plant Genome Purification Kit	Thermo Scientific	K0791	
Glacial acetic acid	VWR	CABDH3093-2.2P	
Glycerol	BioBasic	GB0232	
HEPES Buffer	Sigma Aldrich	H-3375	
Hygromycin B	Fisher Scientific	AAJ6068103	
K ₂ HPO ₄	VWR	BDH9266-500G	
Kanamycin	Gold Biotechnologies	K-250-25	
KH ₂ PO ₄	VWR	BDH9268-500G	
MgSO ₄ ·7H ₂ O	VWR	97062-134	
MnCl ₂ ·4H ₂ O	JT Baker	BAKR2540-01	
Na ₂ CO ₃	VWR	BDH7971-1	
Na ₂ EDTA·2H ₂ O	JT Baker	8993-01	
Na ₂ MoO ₄ ·2H ₂ O	JT Baker	BAKR3764-01	

NaCl	VWR	BDH7257-7	
NaH ₂ PO ₄ H ₂ O	Millipore Sigma	CA80058-650	
NaNO ₃	VWR	BDH4574-500G	
NEBExpress Ni Resin	NewEngland BioLabs	NEB #S1427	
NH ₄ Cl	VWR	BDH9208-500G	
pCAMBIA1302	Leiden University	Gift from Prof. Paul Hooykaas	pBR322, Kan ^R , pVS1, T-DNA(CaMV 35S/Hyg ^R /CaMV polyA, CaMV 35S promoter/mgpf5-6xhis/NOS terminator)
Polypropylene Columns (5 mL)	QIAGEN	34964	
Precision Plus Protein Unstained Protein Standards, Strep-tagged recombinant, 1 mL	Bio-Rad	1610363	
Rifampicin	Millipore Sigma	R3501-1G	
SunBlaster LED Strip Light 48 Inch	SunBlaster	210000000906	
Synergy 4 Microplate UV/Vis spectrometer	BioTEK	S4MLFPTA	
Tetracycline	Thermo Scientific Chemicals	CAAAJ61714-14	
TGX Stain-Free FastCast Acrylamide Kit, 12%	Bio-Rad	1610185	
Thiamine	TCI America	T0181-100G	
Tris Base	Fisher Scientific	BP152-500	
Tryptone	BioBasic	TG217(G211)	
Vitamin B12 (cyanocobalamin)	Enzo Life Sciences	89151-436	
Yeast Extract	BioBasic	G0961	
ZnSO ₄ ·7H ₂ O	JT Baker	4382-01	