

Materials List for:

Rapid Deletion Production in Fungi via *Agrobacterium* Mediated Transformation of OSCAR Deletion Constructs

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URL: <https://www.jove.com/video/55239>

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Materials

Name	Company	Catalog Number	Comments
FungiDB			Database/ http://fungidb.org/fungidb/
IDT PrimerQuest	IDT		Primer design online software/ http://www.idtdna.com/Primerquest/Home/Index
Microsoft Word			Sequence file manipulation
Low Na LB Spec 100 medium			<i>E. coli</i> transformant selection, composition: 1% tryptone, 0.05% NaCl, 0.5% yeast extract, 1.5% agar if for solid medium
Co-cultivation medium			ATMT transformation induction (Reference 12)
Aspergillus minimal medium with Hygromycin			Fungal transformant selection
PDA medium	Acumedia	7149A	Single spore slant tubes
PDA-Hyg-Kan medium			Fungal transformant isolation, PDA containing 150 µg/mL hygromycin B and 100 µg/mL Kanamycin
Glass beads	Genlantis	C400100	Plate spreading
Nitrocellulose filters (47 mm)	Fisher	09-719-555	Co-culturing for ATMT
Various centrifuge tubes			multiple preps
Petri plates (various)			Culturing of bacteria and Fungi
pA-Hyg OSCAR	Addgene	29640	Selectable marker vector
pOSCAR	Addgene	29639	Assembly vector
DH5α One Shot Competent <i>E. coli</i> cells	Life Technologies	12297-016	BP reaction transformation
ccdB survival <i>E. coli</i> cells	Life Technologies	A10460	Maintenance of pOSCAR
Wooden transfer sticks			Colony streaking
Toothpicks			Colony picking
Microcentrifuge			Pelleting Bacteria, etc.
Preparative centrifuge			Fungal spore collection
Dissecting microscope			Single spore isolation
Automated Cell Counter			Spore suspension calculation
Compound microscope			Hemocytometer cell counting
QIAquick PCR Purification Kit	Qiagen	28104	PCR gene flank product purification

TaKaRa LA <i>Taq</i>	Takara Bio USA	RR002A	Hi Fidelity <i>taq</i> polymerase for OSCAR flank generation
Hygromycin B	InvivoGen	ant-hg-5	
Spectinomycin	Sigma	22189-32-8	
Cefotaxime	TCI America	C2224	
Kanamycin		11815032	
Moxalactam	Sigma-Aldrich	43963	
GelRed	Phenix Research Products	RGB-4103	Post staining agarose gels
Qiagen QIAquick PCR Purification Kit (Cat. No. 28104)			
(OneShot_ Mach1™ T1R or One Shot_ OmniMAX™ 2 T1R from Invitrogen)	Thermo Fisher Scientific	C862003	
Gateway BP Clonase II Enzyme mix	Thermo Fisher Scientific	11789020	Used to assemble deletion construct in pOSAR