

Materials List for:

Multi-enzyme Screening Using a High-throughput Genetic Enzyme Screening System

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Materials

Name	Company	Catalog Number	Comments
CopyControl	Epicentre	CCFOS110	Fosmid library production kit
CopyControl Induction Solution	Epicentre	CCIS125	Fosmid copy induction solution
EPI300	Epicentre	EC300110	Electrocompetent cell
pCC1FOS	Epicentre	CCFOS110	Fosmid vector
Gene Pulser Mxcell	Bio-Rad		Electroporation cuvette and electroporate system
FACSAria III	Becton Dickinson		Flow Cytometry (FACS machine)
AZ100M	Nikon		Microscope
UltraSlim	Maestrogen		LED illuminator
50-ml conical tube	BD Falcon		
14-ml round-bottom tube	BD Falcon		
5-ml round-bottom tube	BD Falcon		
<i>p</i> -nitrophenyl phosphate	Sigma-Aldrich	N7653	Substrate
<i>p</i> -nitrophenyl β-D-cellobioside	Sigma-Aldrich	N5759	Substrate
<i>p</i> -nitrophenyl butylate	Sigma-Aldrich	N9876	Substrate
Luria-Bertani (LB)	BD Difco	244620	Tryptone 10 g/L, Yeast extract 5 g/L, Sodium Chloride 10 g/L
Super Optimal broth (SOB)	BD Difco	244310	Tryptone 20 g/L, Yeast extract 5 g/L, Sodium Chloride 0.5 g/L, Magnesium Sulfate 2.4 g/L, Potassium Chloride 186 mg/L
Super Optimal broth with Catabolite repression (SOC)		SOB, 0.4 % glucose	
2x Yeast Extract Tryptone (2xYT)	BD Difco	244020	Pancreatic digest of Casein 16 g/L, Yeast extract 10 g/L, Yeast extract 5 g/L
Cell storage media			2x YT broth, 15% Glycerol, 2% Glucose
pGESS(E135K)			A DNA vector containing <i>dmpR</i> , <i>egfp</i> genes with their appropriate promoters, RBS, and terminator. See the reference 5 in the manuscript for more details.
Chloramphenicol	Sigma	C0378	
Ampicillin	Sigma	A9518	
BD FACSDiva	Becton Dickinson		Flow Cytometry Software Version 7.0

PBS	Gibco	70011-044	0.8% NaCl, 0.02% KCl, 0.0144% Na ₂ HPO ₄ , 0.024% KH ₂ OP ₄ , pH 7.4
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