

Materials List for:

Engineering and Evolution of Synthetic Adeno-Associated Virus (AAV) Gene Therapy Vectors via DNA Family Shuffling

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Materials

Name	Company	Catalog Number	Comments
DNase I	Invitrogen	18068-015	
Polyethylenimine (PEI)	Sigma-Aldrich	408727	
Restriction enzymes	New England Biolabs	Various	
T4 DNA Ligase	New England Biolabs	M0202T	
Gel extraction kit	Qiagen	28704	
Phusion II polymerase Kit	Finnzymes	F-540S	
HotStar Hifi polymerase Kit	Qiagen	202602	
DMSO	Finnzymes	F-540S (part of kit)	
EDTA (25 mM)	Invitrogen	18068-015 (part of kit)	
Tris	Carl Roth GmbH	4855.2	
Ampicillin sodium salt	Carl Roth GmbH	K029.2	
dNTPs (10 mM, 100 µl)	Invitrogen	18427013	
Iodixanol (OptiPrep)	Axis-Shield	1114739	
Phenolred	Merck & Co., Inc.	107241	
Plasmid mega prep kit	Qiagen	12181	
Ultracentrifuge	Beckman Coulter Inc.	Optima L90K	
Quick-Seal centrifuge tubes	Beckman Coulter Inc.	342414	
Electroporation unit	Bio-Rad	GenePulserXcell	
Thermal cycler	Eppendorf	Vapo Protect	
Heating block	BIOER	MB-102	
Fluorescence microscope	Olympus Corporation	IX81	
FACS analyser	Beckman Coulter Inc.	Cytomics FC500 MLP	
MegaX DH10B T1R cells	Invitrogen	C640003	
Benzonase	Merck & Co., Inc.	101695	
Adenovirus-5	ATCC	VR-5	
pBlueScript II KS(+) plasmid	Stratagene, Agilent Technologies	212207	
cap5F (Pac I site in yellow, cap5-specific sequences in bold): GACTCTTAATTAACAGG TATGCTTTTGT TGATCACCCTCC	IDT	Custom primer	
cap5R (Asc I site in green, cap5-specific sequences in bold): GTGAGGGCGCGCCT TAAAGGGT CGGGTAAGGTATC	IDT	Custom primer	