

Materials List for:

CRISPR/Cas9-Mediated Targeted Integration *In Vivo* Using a Homology-Mediated End Joining-Based Strategy

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Materials

Name	Company	Catalog Number	Comments
pX330	Addgene	42230	
pAAV vector	Addgene	37083	
pX260	Addgene	42229	
AAV_Efs_hSpCas9-NLS_FLAG-SV40	Addgene	97307	AAV vector for encoding a human codon-optimized SpCas9 driven by EFs promoter
AAV_Actb HMEJ donor_U6_sgRNA_EF1a_GFP_polyA	Addgene	97308	HMEJ donor for fusing a p2A-mCherry reporter to mouse Actb. EGFP driven by EF1a promoter and U6-driven sgRNAs targeting Actb. AAV backbone.
AAV_Cdx2 HMEJ donor	Addgene	97319	HMEJ donor for fusing a p2A-mCherry reporter to mouse Cdx2.
Lipofectamine 3000 Transfection Reagent	Life Technology	L3000015	
Nuclease-Free Water	Life Technologies	AM9930	
Bbs I	New England Biolabs	R0539S	
NEB Buffer 2	New England Biolabs	B7002S	
T7 endonuclease I	New England Biolabs	M0302L	
NEBuilder HiFi DNA Assembly Master Mix	New England Biolabs	E2621L	
Plasmid EndoFree-Midi Kit	Qiagen	12143	
MMESSAGE MMACHINE T7 ULTRA	Life Technologies	AM1345	
MEGACLEAR KIT 20 RXNS	Life Technologies	AM1908	
MEGASHORTSCRIPT T7 KIT 25 RXNS	Life Technologies	AM1354	
Flaming/Brown Micropipette Puller	Sutter Instrument	P-97	Micropipette Puller (parameters: heat, 74; pull, 60; velocity, 80; time/delay, 200; pressure, 300)
Borosilicate glass	Sutter Instrument	B100-78-10	type of capillaries (outer diameter 1.0 mm, inner diameter 0.78 mm with filament)
FemtoJet microinjector	Eppendorf		
Freezing microtome	Leica	CM1950-Cryostat	thickness of 40 µm for brain, 10 µm for liver

Rabbit anti-mCherry	GeneTex		
Cy3-AffiniPure Goat Anti-Rabbit IgG	Jackson ImmunoResearch		
DMEM	Gibco	11965092	
FBS	Gibco	10099141	
NEAA	Gibco	11140050	
Pen,Strep,Glutamine	Gibco	10378016	
Gel Extraction Kit	Omega	D2500-02	
FACS	BD Arian		
PMSG	Ningbo Sansheng Medicine	S141004	
HCG	Ningbo Sansheng Medicine	B141002	
Cytochalasin B	Sigma	CAT#C6762	
KSOM+AA with D-Glucose and Phenol Red	Millipore	CAT#MR-106-D	
M2 Medium with Phenol Red	Millipore	CAT#MR-015-D	
Mineral oil	Sigma		