

Materials List for:

Adeno-associated Virus-mediated Transgene Expression in Genetically Defined Neurons of the Spinal Cord

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Materials

Name	Company	Catalog Number	Comments
Equipment			
micropipette puller: DMZ-Universal-Electrode-Puller	Zeitz	NA	
anesthesia unit: Oxymat3 oxygen concentrator	Weinmann	NA	
anesthesia unit: VIP 3000 Veterinary Vaporizer	Midmark	NA	
Heat mat: Mio Star Thermocare 100	Migros	717614700000	
Electric shaver	Philips	BT9290	
surgical microscope (OPMI pico)	Zeiss	NA	
Small animal stereotaxic apparatus	Kopf	NA	
Neurostar StereoDrive (optional)	Neurostar	NA	
Model 51690 Cunningham mouse spinal adaptor	Harvard Apparatus	72-4811	
PHD Ultra syringe pump with nanomite	Harvard Apparatus	70-3601	
Hamilton 701 RN 10 µl glass microliter syringe	Hamilton	7635-01	
Hamilton Removable needle (RN) compression fitting 1 mm	Hamilton	55750-01	
fine dentistry drilling apparatus: Osada success 40	Osada	OS-40	
spherical cutter, 0.5mm	Busch	12001005B	
electronic von Frey anesthesiometer	IITC	23905	
flexible von Frey hairs	IITC	#7	
LSM710 Pascal confocal microscope	Zeiss	NA	
0.8 NA × 20 Plan-apochromat objective	Zeiss	NA	
1.3 NA × 40 EC Plan-Neofluar oil-immersion objective	Zeiss	NA	
Name Company Catalog Number Comments			
Surgical Tools			
Scalpel Handle #4, 13cm	Fine Science Tools	10004-13	
Extra Fine Bonn Scissors	Fine Science Tools	14084-08	

Adson forceps, 1 x 2 teeth, 12 cm	Fine Science Tools	11027-12	
Friedman-Pearson rongeurs, curved, 0.7 mm cup	Fine Science Tools	16121-14	
Dumont #2 laminectomy forceps	Fine Science Tools	11223-20	
Olsen-Hegar needle holders, serrated, 8.5 mm clamp length	Fine Science Tools	12002-12	
Fine forceps #5	Fine Science Tools	11254-20	
Name	Company	Catalog Number	Comments
Consumables and Chemicals			
Thin-wall glass capillary, 1mm outside diameter	World Precision Instruments	TW 100-3	
Syringes (1, 5 and 20 ml)	B. Braun	(9166917V, 4606051V, 4606205V)	
26G beveled needle	B. Braun	4665457	
Sterile scalpel blades	B. Braun	BB523	
Surgical sutures Safil Quick+ 4/0, absorbable	B. Braun	C1046220	
Surgical sutures Premilene 5/0, non-absorbable	B. Braun	C0932191	
Sterile PBS or saline (0.9%)		NA	
Ethanol, 70% (disinfectant)		NA	
Iodine solution (e.g. Braunol)	B. Braun	18380	
Anaesthetics (e.g. Attane isoflurane)	Provet	2222	
Aldasorber	Provet	333526	
analgesics (e.g. buprenorphine: temgesic)	Indivior	GTIN: 7680419310018	
Ophthalmic ointment (e.g. vita-pos)	Pharma medica	GTIN: 4031626710635	
Cotton swabs (e.g. from)	IVF Hartmann	1628100	
Facial tissues (e.g. from)	Uehlinger AG	2015.10018	
Superfrost plus microscope slides	ThermoScientific	J1800AMNZ	
Name	Company	Catalog Number	Comments
Mice			
C57BL/6J mice (wildtype)	The Jackson Laboratory	RRID:IMSR_JAX:000664	
Rorbtm1.1(cre)Hze/J mice (RORβCre)	The Jackson Laboratory	RRID:IMSR_JAX:023526	
Gt(ROSA)26Sortm14(CAG-tdTomato)Hze/J mice (R26Tom)	The Jackson Laboratory	RRID:IMSR_JAX:007914	
Name	Company	Catalog Number	Comments
Viral vectors			
AAV1.CB7.CI.eGFP.WPRE.rBG (AAV1.CAG.eGFP)	Penn Vector Core	AV-1-PV1963	
AAV1.CAG.flex.eGFP.WPRE.bGH (AAV1.CAG.flex.eGFP)	Penn Vector Core	AV-1-ALL854	
AAV1.CAG.flex.tdTomato.WPRE.bGH (AAV1.CAG.flex.tdTomato)	Penn Vector Core	AV-1-ALL864	
AAV1.EF1a.flex.DTA.hGH (AAV1.EF1a.flex.DTA)	Penn Vector Core	Custom production	
AAV1.hSyn.DIO.hM3D(Gq)-mCherry.hGH (AAV.flex.hM3D(Gi))	Penn Vector Core	Custom production	
Name	Company	Catalog Number	Comments

Plasmids			
pAAV.hSyn.flex.hM3D(Gq)-mCherry	Addgene	44361	
pAAV.EF1α.flex.hChR2(H134R)-eYFP	Addgene	20298	
Name	Company	Catalog Number	Comments
Bacteria			
MDS42	ScarabGenomics		
Stbl3	ThermoScientific	C737303	
Name	Company	Catalog Number	Comments
Reagents			
EndoFree Plasmid Maxi Kit	Quiagen	12362	
NucleoBond PC 500	Machery & Nagel	740574	
clozapine-N-oxide (CNO)	Enzo Life Sciences	BBL-NS105-0025	
chloroquine diphosphate salt	Sigma	C6628	
histamine	Sigma	H7125	
Dapi	Invitrogen	D3571	
Name	Company	Catalog Number	Comments
Antibodies (dilution)			
Rabbit anti-GFP (1:1000)	Molecular Probes	RRID:AB_221570	
Rabbit anti-NeuN (1:3000)	Abcam	RRID:AB_10711153	
Goat anti-Pax2 (1 : 200)	R & D Systems	RRID:AB_10889828	
Guinea pig anti-Lmx1b (1 : 10 000)	Dr Carmen Birchmeier	Muller et al. 2002	
Rabbit anti-GFAP (1 : 1000)	DakoCytomation	RRID:AB_10013382	
Secondary antibodies raised in donkey (1:800)	Jackson ImmunoResearch Laboratories	NA	