

Materials List for:

Two Different Real-Time Place Preference Paradigms Using Optogenetics within the Ventral Tegmental Area of the Mouse

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Materials

Name	Company	Catalog Number	Comments
AAV-Cre dependent virus	UNC Vector Core	-	a great variety of viruses to suit any project's needs
Agarose	VWR Life Science	443666A	
Buffer for PCR	KAPA BIOSYSTEMS	KB1003	10x, contains 1.5mM MgCl ₂ at 1x
Bupivacaine (Marcain)	Aspen	N01BB01	local anesthetic, 5 mg/ml solution, requires prescription
Carprofen (Norocarp)	N-Vet	27636	anti-inflammatory, analgesic; 50 mg/ml solution, requires prescription
dNTP set	Thermo Fisher Scientific	R0181	100mM, have to be diluted to 10mM and mixed
DNA ladder	Thermo Fisher Scientific	SM0243	100 bp, 50 µg Gene Ruler
DNA loading dye	Thermo Fisher Scientific	R0611	6x, dilute to 1x before using
Ear puncher	AgnThos	AT7000	ear puncher to take tissue samples for PCR or to mark animals
Fiberoptic patchcords	Doric Lenses	MFP_200/240/900-0.22_1m_FC-ZF1.25	
Implantable fiberoptics	Doric Lenses	MFC_200/245-0.37_5mm_ZF1.25	The properties of the fibers might change depending on the experiment
Infusion pump for virus injections	AgnThos	Legato 130	contains remote pump to secure the syringe directly on the stereotaxi frame
Isoflurane (Forane)	Baxter	N01AB06	Volatile anesthetic, requires prescription
Jewelry screws	AgnThos	MCS1x2	
Laser source	Marwell Laser Systems	CNI MBL-III-473-100mW	
Microcontroller board	Arduino	"Uno" board	can be ordered from several companies
Microdrill	AgnThos	1474	could be ordered with or without stereotaxic holder
Needle (34G)	World Precision Instruments	NF36BV	
Nucleic Acid gel stain - GelRed	Biotium	41003-T	
PCR tubes	Axygen	PCR-0208-CP-C	
Power meter	Thorlabs	PM100D	
Place Preference Apparatus	Panlab	76-0278	
Rotary joint	Doric Lenses	FRJ_1x1_FC-FC	

Sleeves	Doric Lenses	SLEEVE_ZR_1-25	mating sleeve to connect the patchcord with the implanted optic fiber
Stabilization cement	Ivoclar Vivadent	Tetric EvoFlow	
Syringe (10ul)	World Precision Instruments	NanoFil	
Taq polymerase	KAPA BIOSYSTEMS	KE1000	500U
TAE buffer	Omega BIO-TEK	SKU:AC10089	50x concentration, has to be dilluted before use
Thermal cycler	BIO-RAD S1000	1852148	necessary to perfrom PCR reactions
Tissue glue	AgnThos	Vetbond	
Tracking software	Noldus	Ethovision XT	
TTL box	Noldus	Noldus USB-IO box	
UV transilluminator	Azure Biosystems	c200 model	