Materials List for:

Ultrasound-Guided Microinjection into the Mouse Forebrain *In Utero* at E9.5

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URL: http://www.jove.com/video/2047/

Materials

Name	Company	Catalog Number	Comments
Micromanipulator	Narishige International	91084361683D	
HI-7 pipette holder	Narishige International	9108436141	
10 mm support arm	Carl Zeiss, Inc.	9108436206	
IP iron base plate	Carl Zeiss, Inc.	9108436167	
CI-1 connector for pipette holder	Carl Zeiss, Inc.	9108436257	
1mm ID tubing	Carl Zeiss, Inc.	911013	
3-way luer lock stopcock (pkg 10)	Carl Zeiss, Inc.	K420163-4503	
Motor controller, 2-4 axes	Newport Corp.	860-c2	
Joystick	Newport Corp.	PMC200-J	
Micrometer adapter	Newport Corp.	ADAPT-BM17-375	
Motorized drive	Newport Corp.	CMA-25CC	
Cable assembly	Newport Corp.	860I-10	
25 mm translation stage	Newport Corp.	UMR8-25	
Micrometer	Newport Corp.	BM17-25	
Base plate	Newport Corp.	M-PBN8	
Inner mounting bracket	Newport Corp.	EQ80-I	
Outer mounting bracket	Newport Corp.	EQ80-E	
Man. infusion/withdrawl pump	Stoelting Co.	51222	
25 l microsyringe	Stoelting Co.	51113	
24"x12"x0.5" metric board plate	Edmund Scientific	NT03-640	
Set of self-adjusting feet	Edmund Scientific	NT34-841	
Bar-type lens holder	Edmund Scientific	NT03-669	
Right angle post clamp	Edmund Scientific	NT53-357	
2" post holder	Edmund Scientific	NT03-646	
4 steel post	Edmund Scientific	NT36-499	
6 steel post	Edmund Scientific	NT36-503	
12/pk set screws, 1/4-20 x 1/2"	Edmund Scientific	NT03-644	
PBS, pH7.4	Invitrogen	10010049	
Slide warmer	Fisher Scientific	Numerous options	
Double Edge Razor Blades	Electron Microscopy Sciences	72000	
Borosilicate Glass O.D: 1.0mm, I.D.: 0.05mm	Sutter Instrument Co.	B100-50-10	
1cc Insulin Syringe U-100 27G5/8	BD Biosciences	329412	
Autoclip Applier	BD Biosciences	427630	
Autoclips, 9mm (to close skin incision)	BD Biosciences	427631	

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5.0 Silk sutures	Fisher Scientific	S-1173	
Sterilube ophthalmic ointment	Fera pharmaceuticals	48102-012-35	
MB-10 or equivalent disinfectant	Quip labs		
10% bleach	Multiple Suppliers		

"One of the following ultrasound backscatter microscopes can be used for this procedure. Although in the video the P40 from Paradigm-Medical is used, the P40 is no longer commercially available, and has been replaced by the P60, which is similarly priced and can be used for the same application. The additional materials described for stage construction are for use with Paradigm-Medical device(s). The Vevo 2100 comes with equipment for small animal imaging.

1. **P60 Ultrasound BioMicroscope** (UBM) from Paradigm-Medical

   (http://www.paradigm-medical.com/ubms.html).
2. **Vevo 2100** from VisualSonics (http://www.visualsonics.com/)

Anesthetic and Analgesic

The Nembutal solution (50 mg/mL injectable sodium pentobarbital; produced by Abbott laboratories) can be obtained from Bulter Schein Animal Health. Note that this is a schedule II controlled substance and requires a Drug Enforcement Agency (DEA) license to obtain.

The Bupivacaine solution (0.25%; produced by Hospira, Inc, among others) can be obtained from a number of distributors, including Moore Medical.

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