

Intracerebroventricular Delivery of Gut-Derived Microbial Metabolites in Freely Moving Mice

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Materials

Name	Company	Catalog Number	Comments
Material			
Advil Liqui-Gels Solubilized Ibuprofen A2:D41	Pfizer	n/a	
Alexa Fluor 488 donkey anti-rabbit	ThermoFisher Scientific	A-21206	
Anti-Fluorescent Gold (rabbit polyclonal)	Millipore	AB153-I	
Bottle Top Vacuum Filter, 500 mL, 0.22 µm, PES, Sterile	NEST	121921LA01	
CaCl ₂	Sigma-Aldrich	C1016	ACSF: 0.14 g/L
Chlorhexidine scrub 2%	Phoenix	NDC 57319-611-09	
Chlorhexidine solution	Phoenix	NDC 57319-599-09	
Commercial dummy	RWD Life Science	62004	Single_OD 0.20 mm/ M3.5/G = 0.5 mm
Commercial guide cannul	RWD Life Science	62104	Single_OD 0.41 mm-27G/ M3.5/C = 2.5 mm
Commercial injector	RWD Life Science	62204	Single_OD 0.21 mm-33G/ Mates with M3.5/C = 3.5 mm/G = 0.5 mm
D-(+)-Glucose	Sigma-Aldrich	G8270	ACSF: 0.61 g/L
Dental acrylic	HYGENIC	n/a	
Fixing screws	RWD Life Science	62521	
Fluoroshield mounting medium with DAPI	Abcam	AB104139	
Horse serum	ThermoFisher Scientific	16050130	
Insulin syringes	BBraun	XG-LBB-9151133S-1BX	1 mL
Isoflurane	Panion & BF biotech	DG-4900-250D	
KCl	Sigma-Aldrich	P3911	ACSF: 0.19 g/L
Ketoprofen	Swiss Pharmaceutical	n/a	
Lidocaine	AstraZeneca	n/a	
Low melting point agarose	Invitrogen	16520	

MgCl ₂	Sigma-Aldrich	M8266	ACSF: 0.19 g/L
Microscope cover slips	MARIENFELD	101242	
Microscope slides	ThermoFisher Scientific	4951PLUS-001E	
Mineral oil light, white NF	Macron Fine Chemicals	MA-6358-04	
NaCl	Sigma-Aldrich	S9888	ACSF: 7.46 g/L
NaH ₂ PO ₄	Sigma-Aldrich	S8282	ACSF: 0.18 g/L
NaHCO ₃	Sigma-Aldrich	S5761	ACSF: 1.76 g/L
n-butyl cyanoacrylate adhesive (tissue adhesive glue)	3M	1469SB	3M Vetbond
Neural tracer	Santa Cruz	SC-358883	FluoroGold
Paraformaldehyde	Sigma-Aldrich	P6148	
Polyethylene tube	RWD Life Science	62329	OD 1.50, I.D 0.50 mm and OD 1.09, I.D 0.38 mm
Puralube Vet (eye) Ointment	Dechra	12920060	
Sodium acetate	Sigma-Aldrich	S2889	SCFAs: 13.5 mM
Sodium azide	Sigma-Aldrich	S2002	
Sodium butyrate	Sigma-Aldrich	B5887	SCFAs: 8 mM
Sodium propionate	Sigma-Aldrich	P1880	SCFAs: 5.18 mM
Stainless guide cannula	Chun Ta stainless steel enterprise CO., LTD.	n/a	OD 0.63 mm; Local vendor
Stainless injector	Chun Ta stainless steel enterprise CO., LTD.	n/a	OD 0.3 mm; dummy is made from injector; local vendor
Superglue	Krazy Glue	KG94548R	
Triton X-100	Merck	1.08603.1000	
Equipment			
Cannula holder	RWD Life Science	B485-68217	
Ceiling camera	FOSCAM	R2	
Digital stereotaxic instruments	Stoelting	51730D	
Dissecting microscope	INNOVIEW	SEM-HT/TW	
Glass Bead Sterilizer	RWD Life Science	RS1501	
Heating pad	Stoelting	53800M	
Leica microscope	Leica	DM2500	
Micro Dissecting Forceps	ROBOZ	RS-5136	Serrated, Slight Curve; Extra Delicate; 0.5mm Tip Width; 4" Length
Micro Dissecting Scissors	ROBOZ	RS-5918	4.5" Angled Sharp
Microinjection controller	World Precision Instruments (WPI)	MICRO2T	SMARTouch Controller
Microinjection syringe pump	World Precision Instruments (WPI)	UMP3T-1	UltraMicroPump3
Microliter syringe	Hamilton	80014	10 µL
Optical Fiber Cold Light with double Fiber	Step	LGY-150	Local vendor
Pet trimmer	WAHL	09962-2018	
Vaporiser for Isoflurane	Step	AS-01	Local vendor
Vibratome	Leica	VT1000S	
Software			
Animal behavior video tracking software	Noldus	EthoVision	Version: 15.0.1416
Leica Application Suite X software	Leica	LASX	Version: 3.7.2.22383