

# Generating Transgenics and Knockouts in *Strongyloides* Species by Microinjection

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## Materials

Name	Company	Catalog Number	Comments
(-)-Nicotine, ≥99% (GC), liquid	Sigma-Aldrich	N3876-5ML	nicotine for paralyzing worms
3" iron C-clamp, 3" x 2" (capacity x depth)	VWR	470121-790	C-clamp to secure setup to bench top
Agarose LE	Phenix	RBA-500	agarose for slides
Bone char, 4 lb pail, 10 x 28 mesh	Ebonex	n/a	charcoal for fecal-charcoal cultures
Bone char, granules, 10 x 28 mesh	Reade	bonechar10x28	charcoal for fecal-cultures (alternative to the above)
Coarse micromanipulator	Narishige	MMN-1	coarse micromanipulator
Corning Costar Spin-X centrifuge tube filters	Fisher	07-200-385	microfilter column
Cover glass, 48 x 60 mm, No. 1 thickness	Brain Research Lab	4860-1	coverslips (48 x 60 mm)
Deep Petri dishes, heavy version with 6 vents, 100 mm diameter	VWR	82050-918	10 cm Petri dishes (for fecal-charcoal cultures)
Eisco retort base w/ rod	Fisher	12-000-101	stand for Baermann apparatus
Eppendorf FemtoJet microinjector microloader tips	VWR	89009-310	for filling microinjection needles
Fisherbrand absorbent underpads	Fisher	14-206-62	bench paper (for prepping)
Fisherbrand Cast-Iron Rings	Fisher	14-050CQ	Baermann o-ring
Fisherbrand tri-cornered polypropylene beakers	Fisher	14-955-111F	Plastic beaker (for mixing)
Fisherbrand tri-cornered polypropylene beakers	Fisher	14-955-111F	Plastic beaker (for catch bucket/ water bucket)
Fisherbrand tri-cornered polypropylene beakers	Fisher	14-955-111F	Plastic beaker (x2) (to make holder)
Gorilla epoxie in syringe	McMaster-Carr	7541A51	glue (to attach tubing)
Halocarbon oil 700	Sigma-Aldrich	H8898-50ML	halocarbon oil
High-temperature silicone rubber tubing for food and beverage, 1/2" ID, 5/8" OD	McMaster-Carr	3038K24	tubing (for funnel)

KIMAX funnels, long stem, 60° Angle, Kimble Chase	VWR	89001-414	Baermann funnel
Kimberly-Clark Professional Kimtech Science benchtop protectors	Fisher	15-235-101	bench paper (for prepping)
Leica stereomicroscope with fluorescence	Leica	M165 FC	GFP stereomicroscope for identifying and sorting transgenic worms
microINJECTOR brass straight arm needle-holder	Tritech	MINJ-4	microinjection needle holder
microINJECTOR system	Tritech	MINJ-1	microinjection system
Mongolian Gerbils	Charles River Laboratories	213-Mongolian Gerbil	gerbils for maintenance of <i>S. stercoralis</i> , male 4-6 weeks
Nasco Whirl-Pak easy-to-close bags, 18 oz	VWR	11216-776	Whirl-Pak sample bags
Nylon tulle (mesh)	Jo-Ann Fabrics	zprd_14061949a	nylon mesh for Baermann holder
Platinum wire, 36 Gauge, per inch	Thomas Scientific	1233S72	platinum/iridium wire for worm picks
Puritan tongue depressors, 152 mm (L) x 17.5 mm (W)	VWR	62505-007	wood sticks (for mixing samples)
QIAprep Spin Miniprep Kit (250)	QIAGEN	27106	QIAGEN miniprep kit
Rats-Long Evans	Envigo	140 HsdBlu:LE Long Evans	rats for maintenance of <i>S. ratti</i> , female 4-6 weeks
Rats-Sprague Dawley	Envigo	002 Hsd:Sprague Dawley SD	rats for maintenance of <i>S. ratti</i> , female 4-6 weeks
Really Useful Boxes translucent storage boxes with lids, 1.6 L capacity, 7-5/8" x 5-5/16" x 4-5/16"	Office Depot	452369	plastic boxes for humidified chamber
Shepherd techboard, 8 x 16.5 inches	Newco	999589	techboard
Stainless steel raised wire floor	Ancare	R20SSRWF	wire cage bottoms
StalkMarket compostable cutlery spoons, 6", white, pack of 1,000	Office Depot	9587303	spoons
Stender dish, stacking type, 37 x 25 mm	Carolina (Science)	741012	watch glasses (small, round)
Stereomicroscope	Motic	K-400 LED	dissecting prep scope
Storage tote, color clear/white, outside height 4-7/8 in, outside length 13-5/8 in, Sterilite	Grainger	53GN16	plastic boxes for humidified chamber
Sutter P-30 micropipette puller	Sutter	P-30/P	needle puller with platinum/iridium filament
Syracuse watch glasses	Fisher	S34826	watch glasses (large, round)
Thermo Scientific Castaloy fixed-angle clamps	Fisher	05-769-2Q	funnel clamps (2x)
Three-axis hanging joystick oil hydraulic micromanipulator	Narishige	MM0-4	fine micromanipulator
United Mohr pinchcock clamps	Fisher	S99422	Pinch clamps (2x)
Vented, sharp-edge Petri dishes (60 mm diameter)	Tritech Research	T3308P	6 cm Petri dishes (for small-scale fecal-charcoal cultures)
VWR light-duty tissue wipers	VWR	82003-820	lining for Baermann holder
watch glass, square, 1-5/8 in	Carolina (Science)	742300	watch glasses (small, square)
Whatman qualitative grade plain circles, grade 1, 5.5 cm diameter	Fisher	09-805B	filter paper (for 6 cm Petri dishes)
Whatman qualitative grade plain circles, grade 1, 9 cm diameter	Fisher	09-805D	filter paper (for 10 cm Petri dishes)
World Precision Instrument borosilicate glass capillary, 1.2 mm x 4 in	Fisher	50-821-813	glass capillaries for microinjection needles
X-Acto Knives, No. 1 Knife With No. 11 Blade	Office Depot	238816	X-Acto knives without blades to hold worm picks

Zeiss AxioObserver A1	Zeiss	n/a	inverted microscope
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