

Spinal Cord Transection In *Xenopus laevis* Tadpoles

Paula G. Slater¹, Juan Larrain¹

¹Center for Aging and Regeneration, Facultad de Ciencias Biológicas, P. Universidad Católica de Chile

Corresponding Author

Juan Larrain

jlarrain@bio.puc.cl

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jove.com/video/63276

Materials

Name	Company	Catalog Number	Comments
Air pump	Regent CALM	RC-006	For oxygen diffuser stones function
ANY-maze software	Stoelting		Swimming behavior test
Ca(NO ₃) ₂ ·4H ₂ O	Sigma-Aldrich	237124	
CaCl ₂ ·2H ₂ O	Sigma-Aldrich	223506	
Camera	Stoelting	60528	Swimming behavior test
Computer			Swimming behavior test (minimum recommended specifications: PC, Windows 7, Intel Core i3, 2 GB RAM, 10-GB drive disk, 1 available USB port, 1,366 × 768 monitor)
Cysteine	Sigma-Aldrich	C7352	
Dissecting stereomicroscope	Nikon	SMZ745T	Surgery / staging
Glass Petri dishes			100 x 20 mm
HEPES	Gibco	11344-041	
Human chorionic gonadotropin			It can be found in different formats in the pharmacy
KCl	Merck Millipore	104936	
LED light box	custom made		wood box: 55-cm length, 34-cm width, 9-cm height, LED lights, transparent polystyrene sheet)
MgSO ₄ ·7H ₂ O	Merck Millipore	105886	
Microdissection scissors for transection	Fine Science Tools	15003-08	Spring Scissors for surgery
MS-222	Sigma-Aldrich	E10521	Anesthetic; tricaine mesylate
NaCl	Merck Millipore	106404	
NaHCO ₃	Sigma-Aldrich	S6014	
Nasco Frog Brittle for Tadpole Xenopus	Nasco	SB09480(LM)MX	Food for Xenopus tadpoles stage 44 to 60
Oxygen diffuser stones	Pentair	AA1	Maintenance of animals
Pair of forceps	Fine Science Tools	Dumont n° 5 SF forceps	For surgery
Penicillin	Sigma-Aldrich	P7794	
pH meter			

Plastic Pasteur pipette	Sigma-Aldrich	Z331740	For collecting embryos after mating
Plastic Petri dishes	Sigma-Aldrich	P5981	150 x 15 mm
Plastic tank/box with lid			4.5 liter capacity; 20 cm × 17 cm × 15 cm or similar
Sterilized gauze			
Streptomycin	Sigma-Aldrich	S1277	
Tablespoon			
<i>Xenopus laevis</i> specialized strains and lines	National Xenopus Resource European Xenopus Resource Centre Xenopus laevis Research Resource Centre		http://www.mbl.edu/xenopus https://xenopusresource.org/ https://www.urmc.rochester.edu/microbiology-immunology/xenopus-laevis.aspx
<i>Xenopus laevis</i> wild type	Xenopus 1 Xenopus Express		https://xenopus1.com http://www.xenopus.com