

Materials List for:

# Utero-tubal Embryo Transfer and Vasectomy in the Mouse Model

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## Materials

Name	Company	Catalog Number	Comments
Ketamine	VEDCO	Ketaved ANADA 200-257	To be ordered by a licensed veterinarian.
Xylazine	Lloyd Laboratories	Anased NADA #139-236	To be ordered by a licensed veterinarian.
Buprenorphine	Generic	NDC 400-42-010-01	To be ordered by a licensed veterinarian.
Eye ointment	Novartis	Genteal	
Antibiotic	Pfizer	Clavamox NADA #55-101.	Added to drinking water (0.3 mg/ml of amoxicillin trihydrate and 0.075 mg/ml of clavulanate potassium). Add 1.5 ml of the reconstituted 15 ml bottle to 250 ml of water.
Dressing serrated forceps	ROBOZ	RS-8120	Any medium size surgical-grade steel straight forceps will work.
Microdissecting serrated forceps	ROBOZ	RS-5137	These ones are curved at a 90° angle. Straight forceps can be used if preferred.
Slight curved micro dissection forceps	ROBOZ	RS-5136	This model is particularly useful to hold the oviduct.
Scissors	ROBOZ	RS-5880	Any regular surgical grade steel small straight scissors will work.
27 G needles	Beckton-Dickinson	305136	Smaller needles (30 G) can be also used. 25 G may be a bit too big.
Clip applier	MiKRon	42763	
9 mm Clips	MiKRon	427631	
Clip remover	MiKRon	7637	Two pairs of teeth forceps (ROBOZ RS-8160) can be used instead.
Suture needle holder	ROBOZ	RS-7820	
Suture	Dowist Gell	5-0 Dexon S 7204-21	Can be substituted for any 4-0 to 6-0 absorbable suture with a narrow curved needle.
Glass capillaries	VWR	100 ul calibrated pipettes 53432-921	It includes a mouth aspirator system that only requires to attach a 0.22 µm filter in the tubing to be ready to use. More information can be obtained in Nagy <i>et al.</i> <sup>8</sup>
Burner	KISAG AG	Typ 2002	Gas operated burner, can be charged with Kigas (CH-4512, from the same vendor). Alcohol burners may be also used, but gas provides a higher temperature and this burner provides a small and precise flame.

Stereomicroscope	Leica	MZFLIII	This is an expensive estereomicroscope with fluorecence, that can be also used for other purposes. There are cheaper options such as Leica MZ8 or Nikon SMZ-10 or SMZ-2B, to name a few. It is better to use two stereomicroscopes, one for handling the embryos (which does not need to be a very nice one) and another one for the recipient. The one used for the recipient should display a long distance from the stage plate to the objective lense, in order to be able to focus 3-4 cm above the stage plate (where the oviduct will be placed) and still leave some room for the surgeon; most of the stereomicroscopes can do this, but some cannot.
Fiber optics illumination	Dolan Jenner	Fiber lite	To illuminate the surgical area. There are different systems available.
Warm stages	American scope	<a href="http://store.amscope.com/tcs-100.html">http://store.amscope.com/tcs-100.html</a>	These can be placed over the stage plate of the stereomicroscope. Some modifications (inserting a stick to level the stage) may be needed if it is too short for the stereomicroscope. A big warm stage can be used for warming the cage if it is available. If not, a regular heating pad can be used, but temperature must be checked.
Culture dishes for embryo manipulation	Falcon	353001	351008 may be also used; they made narrower drops.