

Materials List for:

# The Mesenteric Lymph Duct Cannulated Rat Model: Application to the Assessment of Intestinal Lymphatic Drug Transport

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URL: <https://www.jove.com/video/52389>

DOI: [doi:10.3791/52389](https://doi.org/10.3791/52389)

## Materials

Name	Company	Catalog Number	Comments
Sterile saline	Baxter healthcare	AHB 1307	Any brand can be used. Example here is Baxter 100 ml saline bags, box of 50
70 % ethanol in water	Any		Any brand can be used
Chlorhexidine gluconate solution (Microshield 4)	Livingstone International	JJ60243L	Any brand can be used. <a href="http://www.livingstone.com.au/?PG=search_result&amp;CAT=6&amp;search=JJ60243L">http://www.livingstone.com.au/?PG=search_result&amp;CAT=6&amp;search=JJ60243L</a>
Betadine solution	Livingstone International	BU0510	Any brand can be used. <a href="http://www.livingstone.com.au/?PG=search_result&amp;CAT=6&amp;search=BU0510">http://www.livingstone.com.au/?PG=search_result&amp;CAT=6&amp;search=BU0510</a>
Ilium Ketamil (Ketamine 100 mg/ml)	PROVET VICTORIA	KETA I 1	<a href="http://www.provet.com.au/">http://www.provet.com.au/</a>
Ilium Xylazil (Xylazine 100 mg/ml)	PROVET VICTORIA	TRO-3828	<a href="http://www.provet.com.au/">http://www.provet.com.au/</a>
ACP 10 Injection (Acepromazine 10 mg/ml)	PROVET VICTORIA	VTG-DACP010020	<a href="http://www.provet.com.au/">http://www.provet.com.au/</a>
Sodium pentobarbitone	PROVET VICTORIA	24529	Any brand can be used. Example here is Lethabarb® 325 mg/ml sodium pentobarbitone, Virbac Animal Health. <a href="http://www.provet.com.au">http://www.provet.com.au</a>
Heparin (35000I.U. in 35 mL)	Sigma Pharmaceuticals	337220	<a href="http://sigmaco.com.au/">http://sigmaco.com.au/</a>
Ethylenediaminetetraacetic acid (EDTA) disodium salt dihydrate	Sigma-Aldrich	E1644	Any brand can be used. Example here is disodium salt of EDTA from Sigma.
Polyethylene (PE) cannula o.d. 0.96 mm x i.d. 0.58 mm	Microtube extensions	PE8050	Any brand can be used. Example here is PE tubing 0.96 x0.58 mm, 30 m
Polyethylene (PE) cannula o.d. 0.8 mm x i.d. 0.5 mm	Microtube extensions	PE9658	Any brand can be used. Example here is PE tubing 0.8 x0.5 mm, 30 m
Ruler	Any		Any brand can be used
Markers	Any		Any brand can be used
Cigarette lighter	Any		Any brand can be used
Veterinary adhesive	Any		Any brand can be used
23 gauge needles	Livingstone International	DN23GX0.75LV	Any brand can be used. Example here is Livingstone Disposable Needle, Sterile, 23GX0.75inch, 100/BOX. <a href="http://www.livingstone.com.au/?PG=search_result&amp;CAT=6&amp;search=DN23GX0.75LV">http://www.livingstone.com.au/?PG=search_result&amp;CAT=6&amp;search=DN23GX0.75LV</a>

25 gauge needles	Livingstone International	DN25GX1.0LV	Any brand can be used. Example here is Livingstone Disposable Needle, Sterile, 25GX1.0inch, 100/BOX. <a href="http://www.livingstone.com.au/?PG=search_result&amp;CAT=6&amp;search=DN25GX1.0LV">http://www.livingstone.com.au/?PG=search_result&amp;CAT=6&amp;search=DN25GX1.0LV</a>
1 ml syringe	Livingstone International	T3SS01TA	Any brand can be used. Example here is Terumo syringe 1 ml Slip Tuberculin 100/Box. <a href="http://www.livingstone.com.au/?PG=search_result&amp;CAT=6&amp;search=T3SS01TA">http://www.livingstone.com.au/?PG=search_result&amp;CAT=6&amp;search=T3SS01TA</a>
10 ml syringe	Livingstone International	T3SS10SA	Any brand can be used. Example here is Terumo syringe 10 ml Slip 100/Box. <a href="http://www.livingstone.com.au/?PG=search_result&amp;CAT=6&amp;search=T3SS10SA">http://www.livingstone.com.au/?PG=search_result&amp;CAT=6&amp;search=T3SS10SA</a>
Gauze swabs	Livingstone International	GSC075	Any brand can be used and cut to required size. Example here is gauze swabs cotton filled 7.5x7.5 cm, 8 ply. <a href="http://www.livingstone.com.au/?PG=search_result&amp;CAT=6&amp;search=GSC075">http://www.livingstone.com.au/?PG=search_result&amp;CAT=6&amp;search=GSC075</a>
Cotton buds	Livingstone International	CTAST075DP	Any brand can be used. Example here is Livingstone cotton applicator plastic double tipped. 75MM. 100/PK. <a href="http://www.livingstone.com.au/?PG=search_result&amp;CAT=6&amp;search=CTAST075DP">http://www.livingstone.com.au/?PG=search_result&amp;CAT=6&amp;search=CTAST075DP</a>
Heating pad	Ratek	WT1	Any brand that keeps temperature at 37C can be used. Example here is Ratek warming tray.
Surgical light	Harvard Apparatus	72-0215 with 72-0267	Any brand can be used. Example here is Harvard apparatus V-Lux 1000 Cold Light Source with Bifurcated Gooseneck Light Guide, Black, 4.7 mm fiber diameter (each arm). <a href="http://www.harvardapparatus.com/webapp/wcs/stores/servlet/product_11051_10001_50601_-1_HAI_ProductDetail">http://www.harvardapparatus.com/webapp/wcs/stores/servlet/product_11051_10001_50601_-1_HAI_ProductDetail</a> and <a href="http://www.harvardapparatus.com/webapp/wcs/stores/servlet/product_11051_10001_35487_-1_HAI_ProductDetail">http://www.harvardapparatus.com/webapp/wcs/stores/servlet/product_11051_10001_35487_-1_HAI_ProductDetail</a>
Surgical microscope	Zeiss	495005-0014-000	Any brand can be used. Example here is Zeiss Stereomicroscope Stemi 2000-C with Stand S Double Spot and KL 300 LED. <a href="https://www.micro-shop.zeiss.com/?l=en&amp;p=us&amp;f=e&amp;i=10143">https://www.micro-shop.zeiss.com/?l=en&amp;p=us&amp;f=e&amp;i=10143</a>
Silk suture	Livingstone International	DTSK163019F4	Any brand can be used. Example here is 3/8 Circle Reverse Cut Silk Suture 3/0 Thread 19mm. <a href="http://www.livingstone.com.au/?PG=search_result&amp;CAT=6&amp;search=DTSK163019F4">http://www.livingstone.com.au/?PG=search_result&amp;CAT=6&amp;search=DTSK163019F4</a>
Scalpel blades	Fine Science Tools (FST)	10020-00	Any brand can be used. Example here is FST Scalpel Blade

			#20. <a href="http://www.finescience.ca/Special-Pages/Products.aspx?ProductId=191">http://www.finescience.ca/Special-Pages/Products.aspx?ProductId=191</a>
Scalpel handle	Fine Science Tools (FST)	10004-13	Any brand can be used. Example here is FST Scalpel Handle #4. <a href="http://www.finescience.ca/Special-Pages/Products.aspx?ProductId=298&amp;CategoryId=51">http://www.finescience.ca/Special-Pages/Products.aspx?ProductId=298&amp;CategoryId=51</a>
1 x Small surgical scissors	Fine Science Tools (FST)	14060-09	Any brand can be used. Example here is FST Fine Scissors, 9 cm with 21 mm cutting edge, sharp, straight. <a href="http://www.finescience.ca/Special-Pages/Products.aspx?ProductId=40&amp;CategoryId=17">http://www.finescience.ca/Special-Pages/Products.aspx?ProductId=40&amp;CategoryId=17</a>
2 x Forceps with serrated curved tip	Fine Science Tools (FST)	11001-13	Any brand can be used. Example here is FST 13 cm standard pattern forceps with curved 2.8x1.4 mm tip. <a href="http://www.finescience.ca/Special-Pages/Products.aspx?ProductId=405&amp;CategoryId=32">http://www.finescience.ca/Special-Pages/Products.aspx?ProductId=405&amp;CategoryId=32</a>
1 x Iridectomy scissors	Fine Science Tools (FST)	15000-08	Any brand can be used. Example here is FST Vannas Spring Scissors - 2.5mm Cutting Edge, Straight. <a href="http://www.finescience.ca/Special-Pages/Products.aspx?ProductId=17&amp;CategoryId=16">http://www.finescience.ca/Special-Pages/Products.aspx?ProductId=17&amp;CategoryId=16</a>
1 x Forceps with straight serrated tip	Fine Science Tools (FST)	11650-10	Any brand can be used. Example here is FST Graefe 10 cm straight with serrated 1 x 0.99 mm tip. <a href="http://www.finescience.ca/Special-Pages/Products.aspx?ProductId=390&amp;CategoryId=32">http://www.finescience.ca/Special-Pages/Products.aspx?ProductId=390&amp;CategoryId=32</a>
1 x Forceps with smooth sharp straight fine tip	Fine Science Tools (FST)	11251-10	Any brand can be used. Example here is FST Dumont #5 forceps straight 11cm with 0.08 x 0.04mm tip. <a href="http://www.finescience.ca/Special-Pages/Products.aspx?ProductId=335&amp;CategoryId=29">http://www.finescience.ca/Special-Pages/Products.aspx?ProductId=335&amp;CategoryId=29</a>
1 x Forceps with smooth fine curved forceps	Fine Science Tools (FST)	11063-07	Any brand can be used. Example here is FST Delicate Forceps 9 cm with smooth 0.4 x 0.3mm tip. <a href="http://www.finescience.ca/Special-Pages/Products.aspx?ProductId=360">http://www.finescience.ca/Special-Pages/Products.aspx?ProductId=360</a>
2 x Hemostats	Fine Science Tools (FST)	13010-12	Any brand can be used. Not all operators use the hemostats. Example is FST 12 cm Micro-Mosquito Hemostats with 20 mm length x 1.3 mm width serrated, straight tip. <a href="http://www.finescience.ca/Special-Pages/Products.aspx?ProductId=377&amp;CategoryId=33">http://www.finescience.ca/Special-Pages/Products.aspx?ProductId=377&amp;CategoryId=33</a>
1 x Suture needle holder	Fine Science Tools (FST)	12001-13	Any brand can be used. Example here is FST 13cm Hasley Needle Holder with 16 mm length x 1.9 mm width tip. <a href="http://www.finescience.ca/Special-Pages/Products.aspx?ProductId=254&amp;CategoryId=70">http://www.finescience.ca/Special-Pages/Products.aspx?ProductId=254&amp;CategoryId=70</a>
1 x Artery clamp	Fine Science Tools (FST)	18050-28	Any brand can be used. Example here is FST Bulldog Serrefines straight, 28 mm long, 9x1.6 mm jaw dimension with medium clamp

			press. <a href="http://www.finescience.ca/Special-Pages/Products.aspx?ProductId=270&amp;CategoryId=82">http://www.finescience.ca/Special-Pages/Products.aspx?ProductId=270&amp;CategoryId=82</a>
Oleic acid	Sigma Aldrich	O1008	When required, any brand can be used. Example here is 99% pure oleic acid. <a href="http://www.sigmaaldrich.com/catalog/product/sial/o1008?lang=en&amp;region=AU">http://www.sigmaaldrich.com/catalog/product/sial/o1008?lang=en&amp;region=AU</a>
<sup>14</sup> C-oleic acid	Perkin	NEC317050UC	Any brand can be used. Example here is Oleic Acid, [ <sup>14</sup> C]-, 50μCi (1.85MBq). <a href="http://www.perkinelmer.com/Catalog/Product/ID/NEC317050UC">http://www.perkinelmer.com/Catalog/Product/ID/NEC317050UC</a>
Sodium taurocholate	Sigma Aldrich	T4009	Any brand can be used. Example here is taurocholic acid sodium salt hydrate ≥95% (TLC) . <a href="http://www.sigmaaldrich.com/catalog/product/sigma/t4009?lang=en&amp;region=AU">http://www.sigmaaldrich.com/catalog/product/sigma/t4009?lang=en&amp;region=AU</a>
Halofantrine	Glaxo Smith Kline		Halofantrine was kindly provided as a gift from Glaxo Smith Kline
Sodium phosphate monobasic	Sigma Aldrich	71507	Any brand can be used. Example here is sodium phosphate monobasic monohydrate, BioXtra, for molecular biology, >99.5%. <a href="http://www.sigmaaldrich.com/catalog/product/sigma/71643?lang=en&amp;region=AU">http://www.sigmaaldrich.com/catalog/product/sigma/71643?lang=en&amp;region=AU</a>
Sodium phosphate dibasic	Sigma Aldrich	71643	Any brand can be used. Example here is sodium phosphate dibasic dihydrate, BioUltra, for molecular biology, >99%. <a href="http://www.sigmaaldrich.com/catalog/product/sigma/71507?lang=en&amp;region=AU">http://www.sigmaaldrich.com/catalog/product/sigma/71507?lang=en&amp;region=AU</a>