

Materials List for

Isolation of Regenerating Hepatocytes after Partial Hepatectomy in Mice

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Materials

Name	Company	Catalog Number	Comments
Reagents			
Alexa Fluor 488 Zombie green	BioLegend	423111	Amine-reactive viability dye
Attane Isoflurane ad us. vet. 99.9%	Provet AG	QN01AB06	CAUTION: needs ventilation
EDTA solution	Sigma-Aldrich	E8008-100ML	-
Ethanol	Sigma-Aldrich	V001229	Dilute with water to 70%
Fetal bovine serum (FCS)	Gibco	A5256701	-
Hanks' Balanced Salt Solution (HBSS), Ca ²⁺ , Mg ²⁺ , phenol red	Sigma-Aldrich	H9269-6x600ML	For digestion/preservation
Hanks' Balanced Salt solution (HBSS), w/o Ca ²⁺ , w/o Mg ²⁺ , no phenol red	Sigma-Aldrich	H6648-6x500ML	For perfusion buffer
HEPES solution, 1 M	Sigma-Aldrich	83264-100ML-F	-
Histoacryl tissue adhesive (butyl-2-cyanoacrylate)	B. Braun	1050052	For stabilization of cannulation site
Hoechst 33258 Staining Dye Solution	Abcam	ab228550	-
Liberase Research Grade	Roche	5401119001	Lyophilized collagenases I/II
NaCl 0.9% 500 mL Ecotainer	B. Braun	123	-
Paralube Vet Ointment	Dechra	17033-211-38	-
Phosphate buffered saline (PBS)	Gibco	A1286301	-
Sudan IV – Lipid staining	Sigma-Aldrich	V001423	-
Temgesic (Buprenorphine hydrochloride), Solution for Injection 0.3 mg/mL	Indivior Europe Ltd.	345928	Narcotics. Store securely.
Trypan blue, 0.4%, sterile-filtered	Sigma-Aldrich	T8154	For cell counting
Williams' Medium E	Sigma-Aldrich	W4128-500ML	-
Materials			
25 mL serological pipette, Greiner Cellstar	Merck	P7865	-
50 mL Falcon tubes	TPP	-	-
BD Neoflon, Pro IV Catheter 26 G	BD Falcon	391349	-

Cell scraper, rotating blade width 25 mm	TPP	99004	-
Falcon Cell Strainer 100 µm Nylon	BD Falcon	352360	-
Fenestrated sterile surgical drape	-	-	Reusable cloth material
Filling nozzle for size 16# tubing (ID 3.1 mm)	Drifton	FILLINGNOZZLE#16	To go into the tubes
Flow cytometry tubes, 5 mL	BD Falcon	352008	-
Male Luer to Barb, Tubing ID 3.2 mm	Drifton	LM41	Connection tube to syringe
Petri dishes, 96 x 21 mm	TPP	93100	-
Prolene 5-0	Ethicon	8614H	To retract the sternum
Prolene 6-0	Ethicon	8695H	For skin suture
Prolene 8-0	Ethicon	EH7470E	Ligature gall bladder
Tube 16#, WT 1.6 mm, ID 3.2 mm, OD 6.4 mm	Drifton	SC0374T	Perfusion tube
Equipment			
BD LSRFortessa Cell Analyzer Flow Cytometer	BD	-	-
Isis rodent shaver	Aesculap	GT421	-
Isofluran station	Provet	-	-
Low-speed centrifuge – Scanspeed 416	Labogene	-	-
Neubauer-improved counting chamber	Mariefeld	-	-
Oxygen concentrator – EverFlo	Philips	1020007	0 – 5 L/min
Pipetboy – Pipettor Turbo-Fix	TPP	94700	-
Shenchen perfusion pump – YZ1515x	Shenchen	YZ1515x	-
Surgical microscope – SZX9	Olympus	-	-
ThermoLux warming mat	Thermo Lux	-	-
Vortex Genie 2, 2700 UpM	NeoLab	7-0092	-
Water bath – Precision GP 02	Thermo scientific	-	Adjust to 42 °C