

Materials List for

Non-invasive PET/MR Imaging in an Orthotopic Mouse Model of Hepatocellular Carcinoma

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Materials

Name	Company	Catalog Number	Comments
0.9% sterile saline	BBraun	N/A	0.9% sodium chloride intravenous infusion, 500 mL
10# Scalpel blade	RWD Life Science Co.,Ltd	S31010-01	Animal surgery tool
10% povidone-iodine solution	Banitore	6.425.678	For disinfection
25G needle with a 1 mL syringe	BD PrecisionGlide	N/A	1 mL syringe with 25G needle for cell suspensions injections
5 mL syringe	Terumo	SS05L	5 mL syringe Luer Lock
70% Ethanol	Merck	1.07017	For disinfection
Automated Cell Counter	Invitrogen	AMQAF2000	For automated cell counting
Buprenorphine	HealthDirect	N/A	Subcutaneous injection (0.05-0.2 mg/kg/12 hours) for analgesic after surgery
Cell Culture Dish (60 mm diameter)	Thermo Scientific	150462	For tumor tissue processing
Centrifuge	Sigma	3-16KL, fixed-angle rotor 12311	For cell suspensions collection
Centrifuge Conical Tube	Eppendorf	EP0030122151	For cell suspensions collection
Culture media (Dulbecco's modified Eagle's medium)	Gibco	10566024	high glucose, GlutaMAX™ Supplement
Digital Caliper	RS PRO	841-2518	For subcutaneous tumor size measurement
Direct heat CO ₂ incubator	Techcomp Limited	NU5841	For cell culture
Dose calibrator	Biodex	N/A	Atomlab 500
DPBS (Dulbecco's phosphate-buffered saline)	Gibco	14287072	For cell wash and injection
Eye lubricant	Alcon Duratears	N/A	Sterile ocular lubricant ointment, 3.5 g
Fetal bovine serum (FBS)	Gibco	A4766801	Used for a broad range of cell types, especially sensitive cell lines

Forceps (curved fine and straight blunt)	RWD Life Science Co.,ltd	F12012-10 & F12011-13	Animal surgery tool
Heating pad	ALA Scientific Instruments	N/A	Heat pad for mice during surgery
Insulin syringe	Terumo	10ME2913	1 mL insulin syringe with needle for radiotracer injections
InterView fusion software	Mediso	Version 3.03	Post-processing and image analysis software
Inverted microscope	Yu Lung Scientific Co., Ltd	BM-209G	For cells morphology visualization
Isoflurane	Chanelle Pharma	N/A	Iso-Vet, inhalation anesthetic, 250 mL
Ketamine	Alfasan International B.V.	HK-37715	Ketamine 10% injection solution, 10 mL
Medical oxygen	Linde HKO	101-HR	compressed gas, 99.5% purity
nanoScan PET/MR Scanner	Mediso	N/A	3 Tesla MR
Needle holder	RWD Life Science Co.,ltd	F31026-12	Animal surgery tool
Nucline nanoScan software	Mediso	Version 3.0	Scanner operating software
Nylon Suture (6/0 and 5/0)	Healthy Medical Company Ltd	000524 & 000526	Animal surgery tool
Penicillin- Streptomycin	Gibco	15140122	Culture media for a final concentration of 50 to 100 I.U./ mL penicillin and 50 to 100 µg/mL streptomycin.
Pentobarbital	AlfaMedic	13003	Intraperitoneal injection (330 mg/kg) to induce cessation of breathing of mice
Sharp scissors	RWD Life Science Co.,ltd	S14014-10	Animal surgery tool
Spring Scissors	RWD Life Science Co.,ltd	S11005-09	Animal surgery tool
Trypan Blue Solution, 0,4%	Gibco	15250061	For cell counting
Trypsin-ethylenediaminetetraacetic acid (EDTA, 0.25%), phenol red.	Gibco	25200072	For cell digestion
Xylazine	Alfasan International B.V.	HK-56179	Xylazine 2% injection solution, 30 mL