

Materials List for:

Utilization of Ultrasound Guided Tissue-directed Cellular Implantation for the Establishment of Biologically Relevant Metastatic Tumor Xenografts

Tina T. Thomas¹, Sahiti Chukkapalli¹, Raelene A. Van Noord¹, Melanie Krook², Mark J. Hoenerhoff³, Jonathan R. Dillman⁴, Elizabeth R. Lawlor^{2,5}, Valerie P. Opirari⁵, Erika A. Newman¹

¹Departments of Surgery, C.S Mott Children's and Women's Hospital, The University of Michigan Medical School

²Departments of Pathology, C.S Mott Children's and Women's Hospital, The University of Michigan Medical School

³Unit for Laboratory Animal Medicine, The University of Michigan Medical School

⁴Departments of Radiology, C.S Mott Children's and Women's Hospital, The University of Michigan Medical School

⁵Departments of Pediatrics, C.S Mott Children's and Women's Hospital, The University of Michigan Medical School

Correspondence to: Erika A. Newman at eanewman@med.umich.edu

URL: <https://www.jove.com/video/57558>

DOI: [doi:10.3791/57558](https://doi.org/10.3791/57558)

Materials

Name	Company	Catalog Number	Comments
Mice			
NOD-SCID	Charles River	394	
NSG	The Jackson Laboratory	5557	
Cell Line			
NB			
IMR-32	ATCC	CCL-127	Established human neuroblastoma cell line
SH-SY5Y	ATCC	CRL-2266	Established human neuroblastoma cell line
SK-N-Be2	ATCC	CRL-2271	Established human neuroblastoma cell line
ES			
TC32	COGcell.ORG		Established human Ewing's Sarcoma cell line
A673	COGcell.ORG		Established human Ewing's Sarcoma cell line
CHLA-25	COGcell.ORG		Established human Ewing's Sarcoma cell line
A4573	COGcell.ORG		Established human Ewing's Sarcoma cell line
Cell Line media			
RPMI	Life Technologies	11875-093	
Matrigel	BD BioSciences	354234	
Dissociation			
Dissection Tools	KentScientific	INSMOUSEKIT	
Human Tumor Dissociation Kit	MACS Miltenyi Biotec	130-095-929	
gentleMACS dissociator	MACS Miltenyi Biotec	130-093-235	
gentleMACS C tubes	MACS Miltenyi Biotec	130-096-334	
Cell Strainer	Corning	431751	
Luciferase Tagging			
Lenti-GFP1 virus	University of Michigan, Vector Core		Luciferase Virus
Steady Glo-Luciferase Assay Kit	Promega	E2510	

Bioluminescence Imaging			
Ivis Spectrum Imaging System	PerkinElmer	124262	
D-Luciferin	Promega	E160X	
Anesthetic			
Inhaled Isoflurane	Piramal Critical Care Inc	66794-0017-25	
Ultrasound Guided Injection			
Vevo 2100 High Resolution Imaging	Vevo	2100	
Hamilton Syringes (27 gauge needle)	Hamilton	80000	
22 Gauge Angiocatheter	BD Biosciences	381423	
Optical ointment	Major Pharmaceuticals	301909	
Nair	Church & Dwight Co		Hair Removal agent
Aquasonic 100 Ultrasound Transmission gel	Parker		Ultrasound gel
Histology			
CD99	DAKO	M3601	Primary Antibody
Tyrosine Hydroxylase	Sigma-Aldrich	T2928	Primary Antibody
Secondary HRP-Polymer antibody	Biocare	BRR4056KG	
Miscellaneous			
10 mL Pipettes	Fisher Scientific	13-676-10J	
5 mL Pipettes	Fisher Scientific	13-676-10H	
1.5 mL Microcentrifuge tubes	Fisher Scientific	05-408-129	
P1000 pipette	Eppendorf	3120000062	
P200 pipette	Eppendorf	3120000054	
P1000 pipette tips	Fisher Scientific	21-375E	
P200 pipette tips	Fisher Scientific	21-375D	
Portable pipette aid	Drummond	4-000-101	
digital animal Weighing Scale	KentScientific	SCL-1015	
Calipers	Fisher Scientific	06-664-16	
6well low attachment plates	Corning	07-200-601	
10 cm Tissue Culture Treated Dishes	Fisher Scientific	FB012924	
Polybrene	Sigma-Aldrich	TR-1003-G	