

Materials List for:

A Mouse Model of Orthopedic Surgery to Study Postoperative Cognitive Dysfunction and Tissue Regeneration

Chao Xiong¹, Zhiquan Zhang¹, Gurpreet S. Baht^{2,3}, Niccolo Terrando^{1,4}

¹Department of Anesthesiology, Duke University Medical Center

²Department of Orthopaedic Surgery, Duke University Medical Center

³Duke Molecular Physiology Institute

⁴Center for Translational Pain Medicine, Duke University Medical Center

Correspondence to: Gurpreet S. Baht at gurpreet.baht@duke.edu, Niccolo Terrando at niccolo.terrando@duke.edu

URL: <https://www.jove.com/video/56701>

DOI: [doi:10.3791/56701](https://doi.org/10.3791/56701)

Materials

Name	Company	Catalog Number	Comments
Isoflurane	Piramal Healthcare	NDC 66794-017-25	Other volatile agents or injectable anesthesia can be also used
Buprenorphine	Reckitt-Benckiser Pharmaceuticals	NDC 12496- 6757-1	Optional and depending on individual Institutional Animal Care and Use Committee recommendations
Ethanol	Fisher Scientific	04-355-451	70% solution for antiseptic treatment of skin and cleaning
10% povidone Iodine	Dynarex		For antiseptic treatment of skin
SomnoSuite	Kent Scientific	SS-01	Low Flow Anesthesia system
MouseSTAT	Kent Scientific	PS1161	Pulse Oximeter & Heart Rate Monitor
Shaver	Wahl	9854L	
Stereomicroscope	Leica	MZ6	
Scalpel Handle	Fine science tools	10003-12	
Scalpel Blades - #11	Fine science tools	10011-00	
Adson Forceps	Fine science tools	11006-12	Needed for stripping the periosteum
Iris Forceps	Fine science tools	11066-07	Useful (1x2 teeth) to causing localized muscle/soft tissue trauma
Bonn Scissors (Straight)	Fine science tools	14084-08	Good for osteotomy, note to change regularly as becomes blunt
Fine Scissors	Fine science tools	14058-09	Sharp scissors for cutting sutures
22G x 3.5 In Quincke Spinal Needle	BD	405181	Use inner rod for pinning
Needle Holders	Fine science tools	12001-13	
Suture	Look	1079B	
C57BL6/J	Jackson Laboratory	stock no. 000664	
eGFP+ (expressing enhanced green fluorescent protein ubiquitously)	Jackson Laboratory	stock no. 003291	