

Materials List for

A Modified Technique for Transverse Aortic Constriction in Mice

Kudusi Abuduwufuer^{*1,2}, James Jiqi Wang^{*1,2}, Huihui Li^{*1,2}, Chen Chen^{1,2}

¹Division of Cardiology, Department of Internal Medicine, Tongji Hospital, Tongji Medical College, Huazhong University of Science and Technology ²Hubei Key Laboratory of Genetics and Molecular Mechanism of Cardiological Disorders, Tongji Hospital, Tongji Medical College, Huazhong University of Science and Technology

* These authors contributed equally

Corresponding Author

Chen Chen
chenchen@tjh.tjmu.edu.cn

Citation

Abuduwufuer, K., Wang, J.J., Li, H., Chen, C. A Modified Technique for Transverse Aortic Constriction in Mice. *J. Vis. Exp.* (186), e64386, doi:10.3791/64386 (2022).

Date Published

August 18, 2022

DOI

10.3791/64386

URL

jove.com/video/64386

Materials

Name	Company	Catalog Number	Comments
4-0 nonabsorbable suture	Jinhuan	HM403	Used for suturing the skin
5 mL syringe	Haifuda Technology Co., Ltd.	BD-309628	Used for making snare containing retractor
7-0 nonabsorbable suture	Jinhuan	HM701	Used for aorta ligation
Animal temperature monitor	Kaerwen	FT3400	Used for monitoring body temperature
Buprenorphine	Sigma	B-044	Used for post-surgical pain treatment
Depilatory cream	Veet	N/A	Used for remove body hair from the surgical area
Heating Pad	Xiaochuangxin	N/A	Used for maintaining body temperature
Ibuprofen	MCE	HY-78131	Used for post-surgical pain treatment
Iron wire (0.5 mm)	Qing Yuan	Iron wire #26	Used for making snare containing retractor
Microscopic tweezers	RWD	F12006-10	Used for penetrating and separating the tissue to open operation space
Needle holder	RWD	F12005-10	Used for pinching off the tip of gauge needle and blunting it
Ophthalmic forceps	RWD	F14012-10	Used for holding skin and other tissues
Ophthalmic scissors	RWD	S11001-08	Used for making skin incision of mouse
Pentobarbital sodium	Sigma	P3761	Used for mouse anesthesia
Sterile operating mat	Hale & hearty	211002	Used for placing animal during surgery
Ultra-sound imaging system	Fujifilm visualsonics	vevo1100	Used for measure the blood flow velocity, left ventricular wall thickness and ejection fraction, https://www.visualsonics.com/product/imaging-systems/vevo-1100