

Materials List for:

Decellularization of Whole Human Heart Inside a Pressurized Pouch in an Inverted Orientation

Doris A. Taylor¹, Luiz C. Sampaio¹, Rafael Cabello¹, Abdelmotagaly Elgalad¹, Rohan Parikh¹, R Patrick Wood², Kevin A. Myer², Alvin T. Yeh³, Po-Feng Lee¹

¹Regenerative Medicine Research, Texas Heart Institute

²Lifegift Organ Donation Center

³Biomedical Engineering, Texas A&M University

Correspondence to: Doris A. Taylor at DTaylor@texasheart.org

URL: <https://www.jove.com/video/58123>

DOI: [doi:10.3791/58123](https://doi.org/10.3791/58123)

Materials

Name	Company	Catalog Number	Comments
2-0 silk suture	Ethicon	SA85H	Suture used to ligate superior and inferior vena cava
1/4" x 3/8" connector with luer	NovoSci	332023-000	Connect aorta and pulmonary artery
Masterflex platinum-cured silicone tubing	Cole-Parmer	HV-96410-16	Tubing to connect heart chambers/veins
infusion and outflow line	Smiths Medical	MX452FL	For flowing solutions through the vasculature
Polyester pouch (Ampak 400 Series SealPAK Pouches)	Fisher scientific	01-812-17	Pericardium-like pouch for containing heart during decellularization
Snapware Square-Grip Canister	Snapware	1022	1-liter Container used for perfusing heart
Black rubber stoppers	VWR	59586-162	To seal the perfusion container
Peristaltic pump	Harvard Apparatus	881003	To pump fluid through the inflow lines and to drain fluids
2 L aspirator bottle with bottom sidearm	VWR	89001-532	For holding solutions/perfusate
Quant-iT PicoGreen dsDNA Assay kit	Life Technologies	P7589	For quantifying dsDNA
Calf thymus standard	Sigma	D4522	DNA standard
Blyscan Glycosaminoglycan Assay Kit	Biocolor Ltd	Blyscan #B1000	GAG assay kit
Plate reader	Tecan	Infinite M200 Pro	For analytical assays
GE fluoroscopy	General Electric	OEC 9900 Elite	Angiogram
Visipaque	GE	13233575	Contrast agent