

Materials List for

Imaging and Analysis of Oil Red O-Stained Whole Aorta Lesions in an Aneurysm Hyperlipidemia Mouse Model

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jove.com/video/61277

Materials

Name	Company	Catalog Number	Comments
1.5 mL Eppendorf tube	DENVILLE	C2170	
10 mL syringe	BD	302995	
16% Formaldehyde	Polysciences	18814-10	
70% ethanol	VWR	RC2546.70-5	To clean the dissection tools
Black dissection wax	CR Scientific	C3541	
Corn oil	Sigma	C8267	Solvent for Tamoxifen
DNeasy Blood & Tissue kit	QIAGEN	69506	To isolate DNA from mouse ear
Dulbecco's Phosphate-buffered saline (1X DPBS), pH 7.4	Gibco	14190-144	
Fine scissors	Fine Science Tools	14059-11	To cut the mouse skin and open the ribcage
Fisherbrand Economy Plain Glass Microscope Slides	Fisher Scientific	12-550-A3	
High cholesterol high fat diet	Research Diets	D12108	To induce atherosclerosis
Imaging software	National Institutes of Health	Image J	Aortic lesion quantification
Isopropanol	VWR	JT9079-5	
Kimwipes	Fisher Scientific	06-666A	To clean the glass microscope slides
McPherson-Vannas Micro Dissecting Spring Scissors	ROBOZ	RS-5602	To separate the heart and the aorta and to cut open the aorta and aorta branches
Microscope control software	Olympus	DP Controller	For aorta imaging
Minutien pins	Fine Science Tools	26002-10	
Needle-25G	BD	305124	
NonWoven Sponge	McKesson	94442000	
Oil Red O	Sigma	O-0625	To stain the atherosclerosis lesions
Pall Acrodisc Sterile Syringe Filters with Super Membrane	VWR	28143-312	To filter working Oil Red O solution
Spring Scissors	Fine Science Tools	15021-15	To dissect and clean the aorta
Statistical software	GraphPad	Prism 8	Statistical analysis

Stereomicroscope	Nikon	SMZ1000	For aorta dissection
Stereomicroscope	Olympus	SZX16	For aorta imaging
Tamoxifen	Sigma	T5648	To induce Cre-loxP recombination
Tissue-Tek O.C.T Compound, Sakura Finetek	VWR	25608-930	
Tweezer Style 4	Electron Microscopy Sciences	0302-4-PO	To cut the mouse skin and open the ribcage
Tweezer Style 5	Electron Microscopy Sciences	0302-5-PO	To dissect and clean the aorta