

A Modified Surgical Model of Hind Limb Ischemia in ApoE^{-/-} Mice using a Miniature Incision

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Materials

Name	Company	Catalog Number	Comments
10x Phosphate buffer saline	Roth	9143.1	Used for haematoxylin and eosin stain and immunohistochemistry stain
30% H ₂ O ₂	Roth	9681.2	Used for immunohistochemistry stain
6-0 absorbable sutures	PROLENE	8776H	Used for stitching the skin
6-0 absorbable suture	PROLENE	EP8706	Used in Surgery
7-0 absorbable sutures	PROLENE	EH8021E	Used for ligating the artery
7-0 absorbable suture	PROLENE	EP8755	Used in Surgery
Acetic acid	Roth	6755.1	Used for haematoxylin and eosin stain
Albumin Fraktion V	Roth	8076.2	Used for immunohistochemistry stain
Autoclave	Systec GmbH	Systec VX-150	Used for the sterilisation of the surgical instruments
Axio vert A1 microscope	Carl Zeiss	ZEISS Axio Vert.A1	Used for viewing and taking the pictures from haematoxylin and eosin stain and immunohistochemistry stain
Bruker BioSpec 94/20 AVIII	Bruker Biospin MRI GmbH	N/A	Scan the femoral artery blockage
Buprenovet Sine 0,3mg/ml	Bayer AG	2542 (WDT)	Used in post operative pain-management. Dose - 0.1 mg/kg body weight every 8 hours for 48 h after operation
CD31 antibody	Abcam	ab28364	Used for immunohistochemistry stain
Eosin Y solution 0.5 % in water	Roth	X883.1	Used for haematoxylin and eosin stain
Epitope Retrieval Solution pH 6	Leica Biosystems	6046945	Used for immunohistochemistry stain
Ethanol ≥ 99,5 %	Roth	5054.1	Used for haematoxylin and eosin stain and immunohistochemistry stain
Fentanyl	Cayman Chemical	437-38-7	Used for anesthesia

Fine point forceps	Medixplus	93-4505S	Used for separating the artery from nerve and vein
Glass bead sterilisator	Simon Keller	Type 250	Used for sterilisation of the surgical instruments
Graefe iris forceps curved	VUBU	VUBU-02-72207	Used for blunt separation of skin and subcutaneous tissue
Hair Remover cream, Veet (with aloe vera)	Reckitt Benckiser	108972	Remove hair from mice hind limbs
Heating plate	STÖRK-TRONIC	7042092	Keep the stable temperature of mice
Hematoxylin	Roth	T865.2	Used for haematoxylin and eosin stain and immunohistochemistry stain
Leica surgical microscope	Leica	M651	Enlarge the field of view to facilitate the operation
Liquid DAB+Substrate Chromogen System	Dako	K3468	Used for immunohistochemistry stain
Male ApoE ^{-/-} mice	Charles River Laboratories	N/A	Used for establish the Peripheral artery disease mice model
Medetomidine	Cayman Chemical	128366-50-7	Used for anesthesia
Micro Needle Holder	Black & Black Surgical	B3B-18-8	Holding the needle
Micro suture tying forceps	Life Saver Surgical Industries	PS-MSF-145	Used to assist in knotting during surgery
Microtome	Biobase	Bk-Mt268m	Used for tissue sectioning
Midazolam	Ratiopharm	44856.01.00	Used for anesthesia
MR-compatible Small Animal Monitoring and Gating System Model 1025	SA Instruments	N/a	monitoring vital signs of animal during MRI scan
Octeniderm farblos	Schülke & Mayr GmbH	180212	used for disinfection of the skin
Ointment for the eyes and nose	Bayer AG	1578675	Keep the eyes wet under the anesthesia
Paraformaldehyde	Roth	0335.1	Used for fixation of the tissue
Pentobarbital	Nembutal	76-74-4	Used for anesthesia
Saline	DeltaSelect	1299.99.99	Used for anesthesia
Spring handle scissors with fine, sharp tips	Black & Black Surgical	B66167	Used for cutting the artery
SuperCut Scissors	Black & Black Surgical	B55992	Used for cutting the skin
Triton X-100	Roth	9002-93-1	Used for immunohistochemistry stain
Western diet, 1.25% Cholesterol	ssniff Spezialdiäten GmbH	E15723-34	Diet for the mice
Xylene	Roth	4436.3	Used for haematoxylin and eosin stain and immunohistochemistry stain