

Materials List for

A Patient-Derived Xenograft Model for Venous Malformation

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Materials

Name	Company	Catalog Number	Comments
Athymic nude mice, (Foxn1-nu); 5-6 weeks, males	Envigo	069(nu)/070(nu/+)	Subcutaneous injection
Biotinylated Ulex europeaus Agglutinin-I (UEA-I)	Vector Laboratories	B-1065	Histological anlysis
Bottle top filter (500 ml; 0.2 µM)	Thermo Fisher	974106	Cell culture
Bovine Serum Albumin (BSA)	BSA	A7906-50MG	Cell culture; Histological analysis
Calcium chloride dihydrate (CaCl ₂ .2H ₂ O)	Sigma	C7902-500G	Cell culture
Caliper	Electron Microscopy Sciences	50996491	Lesion plug measurment
CD31-conjugated magnetic beads (Dynabeads)	Life Technologies	11155D	EC separation
Cell strainer (100 µM)	Greiner	542000	Cell culture
Collagenase A	Roche	10103578001	Cell culture
Conical Tube; polypropylene (15 mL)	Greiner	07 000 241	Cell culture
Conical Tube; polypropylene (50 mL)	Greiner	07 000 239	Cell culture
Coplin staining jar	Ted Pella	21029	Histological anlysis
Coverglass (50 X 22 mm)	Fisher Scientific	12545E	Histological anlysis
DAB: 3,3'Diaminobenzidine Reagent (ImmPACT DAB)	Vector Laboratories	SK-4105	Histological anlysis
Dulbecco's Modification of Eagle's Medium (DMEM)	Corning	10-027-CV	Cell culture
DynaMag-2	Life Technologies	12321D	EC separation
Ear punch	VWR	10806-286	Subcutaneous injection
EDTA (0.5M, pH 8.0)	Life Technologies	15575-020	Histological anlysis
Endothelial Cell Growth Medium-2 (EGM2) Bulletkit (basal medium and supplements)	Lonza	CC-3162	Cell culture
Eosin Y (alcohol-based)	Thermo Scientific	71211	Histological anlysis
Ethanol	Decon Labs	2716	Histological anlysis

Fetal Bovine Serum (FBS) , HyClone	GE Healthcare	SH30910.03	Cell culture
Filter tip 1,250 µL	MidSci	AV1250-H	Multiple steps
Filter tip 20 µL	VWR	10017-064	Multiple steps
Filter tip 200 µL	VWR	10017-068	Multiple steps
Formalin buffered solution (10%)	Sigma	F04586	Lesion plug dissection
Hemocytometer (INCYTO; Disposable)	SKC FILMS	DHCN015	Cell culture
Hematoxylin	Vector Hematoxylin	H-3401	Histological analysis
Human plasma fibronectin purified protein (1mg/mL)	Sigma	FC010-10MG	Cell culture
Hydrogen Peroxide solution (30% w/w)	Sigma	H1009	Histological analysis
ImageJ Software			Analysis
Isoflurane, USP	Akorn Animal Health	59399-106-01	Subcutaneous injection
magnesium sulfate heptahydrate (MgSO ₄ .7H ₂ O)	Sigma	M1880-500G	Cell culture
Basement Membrane Matrix (Phenol Red-Free; LDEV-free)	Corning	356237	Subcutaneous injection
Microcentrifuge tube (1.5 mL)	VWR	87003-294	EC separation
Microscope Slide Superfrost (75mm X 25mm)	Fisher Scientific	1255015-CS	Histological analysis
Needles, 26G x 5/8 inch Sub-Q sterile needles	Becton Dickinson (BD)	BD305115	Subcutaneous injection
Normal horse serum	Vector Laboratories	S-2000	Histological analysis
Penicillin-Streptomycin-L-Glutamine (100X)	Corning	30-009-CI	Cell culture
Permanent mounting medium (VectaMount)	Vector Laboratories	H-5000	Histological analysis
Pestle Size C, Plain	Thomas Scientific	3431F55	EC isolation
Phosphate Buffered Saline (PBS)	Fisher Scientific	BP3994	Cell culture
Scale	VWR	65500-202	Subcutaneous injection
Serological pipettes (10 ml)	VWR	89130-898	Cell culture
Serological pipettes (5ml)	VWR	89130-896	Cell culture
Sodium carbonate (Na ₂ CO ₃)	Sigma	223530	Cell culture
Streptavidin, Horseradish Peroxidase, Concentrate, for IHC	Vector Laboratories	SA-5004	Cell culture
Syringe (60ml)	BD Biosciences	309653	Cell culture
SYRINGE FILTER (0.2 µM)	Corning	431219	Cell culture
Syringes (1 mL with Luer Lock)	Becton Dickinson (BD)	BD-309628	Subcutaneous injection
Tissue culture-treated plate (100 X 20 mm)	Greiner	664160	Cell culture
Tissue culture-treated plate (145X20 mm)	Greiner	639160	Cell culture
Tissue culture-treated plates (60 X 15) mm	Eppendorf	30701119	Cell culture
Tris-base (Trizma base)	Sigma	T6066	Histological analysis
Trypan Blue Solution (0.4 %)	Life Technologies	15250061	Cell culture
Trypsin EDTA, 1X (0.05% Trypsin/0.53mM EDTA)	Corning	25-052-CI	Cell culture
Tween-20	Biorad	170-6531	Histological analysis
Wheaton bottle	VWR	16159-798	Cell culture
Xylenes	Fisher Scientific	X3P-1GAL	Histological analysis