

Materials List for:

Intestinal Stem Cell Isolation and Culture in a Porcine Model of Segmental Small Intestinal Ischemia

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Materials

Name	Company	Catalog Number	Comments
Phosphate Buffered Saline, Ca2+, Mg 2+ free	Fisher Scientific	BP-399	Dilute 1:10
Distilled, deionized water (ddH2O)			Used to prepare EDTA and PBS
Dimethyl Sulfoxide (DMSO)	Thermo Scientific	20688	
Ethylenediamine tetraacetic acid (EDTA)	Sigma Aldrich	ED45	Make fresh before each experiment; pH 7.4
1,4-Dithiothreitol (DTT)	Sigma Aldrich	646563	
Y-27632	Sigma Aldrich	Y0503	
Advanced DMEM/F12	Life Technologies	12634-010	
N2 Supplement	Life Technologies	17502-048	
B-27 Supplement	Life Technologies	12587-010	
HEPES	Life Technologies	15630-106	
Glutamax	Life Technologies	35050-061	
Penicillin/Streptomycin/Amphotericin B	Gibco	15240-096	Anti-Anti solution
Recombinant human Wnt-3a	R & D Systems	5036 WN/CF	
Recombinant human Rspodin1	R & D Systems	4645- RS	
Recombinant human Noggin	R & D Systems	6057-NG	
Recombinant human EGF	R & D Systems	236-EG	
LY2157299	SelleckChem	52230	
CHIR99021	Cayman Chemical	13122	
Human [leu]15-Gastrin 1	Sigma Aldrich	G9145	
SB202190	Sigma Aldrich	57067	
A83-01	Tocris	2939	
Nicotinamide	Sigma Aldrich	N0636	
Acetic Acid	Sigma Aldrich	695092	
Water, WFI Quality	Corning, Inc.	25-055-CM	Referred to as sterile water (SW); for growth factor stocks
Bovine Serum Albumin (BSA)	Sigma Aldrich	A2153	
Matrigel Matrix, GFR	Corning, Inc.	356231	Phenol red free
24 Well Culture Dish	Corning, Inc.	3524	
Conical Tube, 50 ml	Corning, Inc.	430828	
Scalpel Handle	World Precision Instruments	500236	
Carbon Steel Surgical Blade, No. 10	World Precision Instruments	504169	
Tissue Forceps	World Precision Instruments	15918	

DeBakey Tissue Forceps	World Precision Instruments	501239	
Mayo Scissors	World Precision Instruments	501752	Curved or straight
Metzenbaum Scissors	World Precision Instruments	501739	
Mosquito Forceps, Curved	World Precision Instruments	503724-12	Curved or straight (503728-12)
Hopkins Bulldog Clamp	Stoelting Co.	52120-40P	Straight
Silk, 2-0	Henry Schein	685S-BUT	Any similar brand is acceptable
Towel Clamps	World Precision Instruments	501700	
Needle Holder	World Precision Instruments	V503382	
Wire suture, 20 gauge	Henry Schein	19075	Cut and straighten before use.
Surgical Towels	Henry Schein	ST1833	Any similar product is acceptable.
Lactated Ringers Solution	Henry Schein	9851	
Chlorhex antiseptic scrub (4%)	Henry Schein	VINV-CHMX-SCRB	Any similar brand is acceptable
Isopropyl Alcohol 70%	Henry Schein	MS071HS	Any similar brand is acceptable
IV catheter, 22 gauge	Henry Schein	2225PUR	May need 20g or 24 g depending on size of the vein
Xylazine (100 mg/ml)	Henry Schein	33198	
Ketamine (100 mg/ml)	Henry Schein	11695-6835-1	Controlled medication
Isoflurane solution	Henry Schein	10015516	
Pentobarbital (Fatal Plus Euthanasia Solution (390 mg/ml))	Vortech Pharm.		Multiple brands of Pentobarbital Sodium available.
Heating pad	Gaymar		Tpump Core Warming System; others are available.
Mindray Datascope Monitor	Mindray North America		Any equivalent piece of monitoring equipment acceptable
Vaporizer	Vetland Medical		Recommended to use a Circle System w/ Y piece; multiple suppliers available.
Fluid Pump	Abbott Hospira		Plum A+; Any similar manufacturer is recommended.