

Materials List for:

Mass Isolation and *In Vitro* Cultivation of Intramolluscan Stages of the Human Blood Fluke *Schistosoma Mansoni*

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Materials

Name	Company	Catalog Number	Comments
Chernin's balanced salt solution (CBSS+)			For 1L of solution
2.8 g sodium chloride	Fisher Scientific	S271-3	Dissolve salts, except calcium chloride, and
0.15 g of potassium chloride	Sigma-Aldrich	P5405	sugars in 800 mL ddH2O
0.07 g sodium phosphate, dibasic anhydrous	Fisher Scientific	S374-500	Dissolve calcium chloride separately in 200
0.45 g magnesium sulfate heptahydrate	Sigma-Aldrich	M1880	mL ddH2O
0.53 g calcium chloride dihydrate	Mallinckrodt	4160	Slowly add calcium soln to the salt/sugar soln with
0.05 g sodium bicarbonate	Fisher Scientific	S233-3	with constant mixing
1 g glucose	MP Biomedicals	152527	Adjust to pH 7.2 and filter sterilize using a
1 g trehalose	Sigma-Aldrich	T0167	0.22 µm disposable bottle-top filter
10 mL 100X penicillin/streptomycin	Hyclone	SV30010	Add filtered penicillin and streptomycin soln prior use
Incomplete Bge medium (Ibge)			For 900 mL solution
220 mL Schneider's Drosophila medium modified	Lonza	04-351Q	Mix Schneider's medium with 680 mL ddH2O
4.5 g lactalbumin enzymatic hydrolysate	Sigma-Aldrich	L9010	Add lactalbumin hydrolysate and galactose
1.3 g galactose	Sigma-Aldrich	G0625	Adjust to pH 7.2 and filter sterilize using a 0.22 µm pre-sterilized disposable bottle-top filter
Complete Bge medium (cBge)			For 100 mL of solution
90 mL Incomplete Bge medium			To heat-inactivate FBS: Incubate thawed FBS in
9 mL heat-inact. fetal bovine serum (FBS) (Optima)	Atlanta Biologicals	S12450	waterbath at 60°C for 1 hr while gently
1 mL 100X penicillin/streptomycin	Hyclone	SV30010	swirling the bottle every 10 min Aliquot heat-inactivated FBS into 15-mL tubes and store at -20°C. Mix medium + FBS and filter sterilize using a 0.22 µm pre-sterilized disposable bottle-top filter Add penicillin and streptomycin prior to use

Pond water (stock solution)			1L of stock solution
12.5 g calcium carbonate	Fisher Scientific	C64-500	Mix all salts in 1L of ddH ₂ O
1.25 g magnesium carbonate	Fisher Scientific	M27-500	Note that the salts will not have completely
1.25 g sodium chloride	Fisher Scientific	S271-3	dissolved. Shake vigorously to suspend
0.25 g potassium chloride	Sigma-Aldrich	P5405	salts prior to making the working soln
Pond water (working solution)			1.5L of solution
0.8 mL stock solution pond water (shake prior use) in			Mix stock to ddH ₂ O
1500 mL of ddH ₂ O			Sterilize pond water by autoclaving (slow cycle)
1.5 mL of 100X penicillin/streptomycin	Hyclone	SV30010	Add penicillin and streptomycin prior use
Saline solution (1.2% NaCl)			1.5L of solution
18 g sodium chloride in 1500 mL of ddH ₂ O	Fisher Scientific	S271-3	Autoclave saline solution to sterilize
1.5 mL of 100X penicillin/streptomycin	Hyclone	SV30010	Add penicillin and streptomycin prior use
Additional equipment and material:			
7-L mouse euthanizing chamber			Following approved IACUC protocol no. V001551
Mice	Taconic Biosciences		Swiss-Webster, female, 6-wk old, murine
CO ₂ tank and regulator			pathogen-free
24-well tissue culture plate	TPP	92424	
1-L volumetric flasks			
Light source (150W)	Chiu Tech Corp	Model F0-150	
Centrifuge, refrigerated, swinging bucket	Eppendorf	Model 5810R	
Centrifuge bottles (250 mL)	Nalgene		
15-mL centrifuge tubes, sterile	Corning	430053	
Sterile disposable transfer pipets	Fisher Scientific	1371120	
0.22 μm pre-sterilized disposable bottle-top filter	EMD Millipore	SCGPS05RE	
Stainless steel blender	Waring Commercial	Model 51BL31	
Blender cup, 100 mL capacity	Waring Commercial		
Inverted compound microscope	Nikon Instruments	Eclipse TE300	