

Materials List for:

Separation of Spermatogenic Cell Types Using STA-PUT Velocity Sedimentation

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Materials

Name	Company	Catalog Number	Comments
BSA	Affymetrix/USB	10857 100MG	Alternate can be used.
0.5%, 2%, and 4% BSA solutions	Dissolve 0.25 g, 11 g, and 22 g (respectively) in total volumes of 50 ml, 550 ml, and 550 ml of 1x KREBS (respectively).	To be made day of the STA-PUT procedure. Filter sterilize.	
KREBS (10x)	3.26 g KH ₂ PO ₄ + 139.5 g NaCl + 5.89 g MgSO ₄ /7H ₂ O + 40 g Dextrose + 3.78 g CaCl ₂ /2H ₂ O + 7.12 g KCl, bring to 2 L with ddH ₂ O	Autoclave/filter and store at 4 °C for several months.	
KREBS (1x)	Dissolve 4.24 g NaHCO ₃ in 100 ml ddH ₂ O. Add 200 ml 10x KREBS. Bring to 2 L with ddH ₂ O.	To be made day of the STA-PUT procedure. Filter sterilize.	
Collagenase	Sigma	C9891-1G	
DNase	Sigma	DNEP-5MG	
Trypsin	Sigma	T9201-1G	
DAPI	Preference of researcher		
Triton-X100	Preference of researcher		
Formaldehyde (~37%)	Preference of researcher		
TABLE 2: EQUIPMENT			
Equipment	Company	Catalog #	Comments
Complete STA-PUT apparatus	ProScience Glass Shop	STA-PUT (this procedure uses the standard sedimentation chamber: Cat. No. 56700-500)	Includes all glassware and equipment for the apparatus. Alternate glassware is available for performing STA-PUT with smaller cell numbers.
10 µm mesh filter	Fisherbrand	22363549	
Mouse dissection tools	Preference of researcher		
14 ml round bottom fraction collection tubes with caps	Preference of researcher		
Need approximately 100 tubes			
Fraction collector	GE Healthcare Life Sciences	Model: Frac-920, Product code: 18-1177-40	Alternate can be used.
Microscope slides, cover glass	Preference of researcher		

Light/Fluorescent Microscope	Preference of researcher		
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