

Materials List for:

Three-dimensional Alginate-bead Culture of Human Pituitary Adenoma Cells

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Materials

Name	Company	Catalog Number	Comments
Reagent			
199 culture medium	Invitrogen	31100-027	For culture, warm in a 37 °C water bath before use
Fetal bovine serum	PAA	A15-751	
Sodium bicarbonate (NaHCO ₃)	Merck	106329	
N-(2-Hydroxyethyl) piperazine-N'-2ethanesulfonic acid (HEPES)	Sigma	H-4034	
Penicillin/Streptomycin	PAA	P11-010	
PBS (Dulbecco's Phosphate Buffered Saline)	Invitrogen	21600-044	
Collagenase type I	Worthington	4176	
Trypsin	Invitrogen	27250-018	
Ethylenediaminetetraacetic acid (EDTA)	Research Organics	3002E	
Sorbean trypsin inhibitor	Invitrogen	17075-029	
DNAse	Worthington	2139	
Alginate acid, From Macrocystis Pyrifera (Kelp)	Sigma	A-2158	
Calcium chloride (CaCl ₂)	J.T. Baker	1332	
Sodium citrate (Na ₃ C ₆ H ₅ O ₇)	J.T. Baker	3646	
Piperazine-N,N'-bis(2-ethanesulfonic acid) (PIPES)	Research Organics	9624P	
Polyethylene Glycol 6000 (PEG 6000)	Calbiochem	528877	
Ethylene glycol tetraacetic acid (EGTA)	Research Organics	9574E	
Magnesium Sulfate (MgSO ₄)	J.T. Baker	2500	
Triton-X 100	Sigma	X100	
Formaldehyde	J.T. Baker	2106	
Paraformaldehyde	Sigma	P6148	
Ammonium chloride (NH ₄ Cl)	J.T. Baker	660	
BSA Bovine Serum Albumin IgG-Free	Jackson Immuno Research	001-000-161	
Phalloidin-Tetramethylrhodamine B isothiocyanate	Sigma	P1951	Toxic. Use gloves to handle this reagent
4',6-Diamidino-2-Phenylindole, Dihydrochloride (DAPI)	Invitrogen	D1306	Toxic. Use gloves to handle this reagent

Sulfuric acid (H ₂ SO ₄)	J.T. Baker	9681	Highly corrosive. Use gloves to handle this reagent
Sodium hydroxide (NaOH)	Merck	1.06498	Can cause eye and skin irritation. Use gloves to handle this reagent
(3-Aminopropyl)triethoxysilane (APTS)	Sigma	A-3648	
Poly-D-lysine hydrobromide	Sigma	P7280	
Trypan blue solution	Sigma	T8154	
Name	Company	Catalog Number	Comments
Equipment			Toxic: May cause cancer. Use gloves to handle this reagent
Rotator	Boekel Scientific	Model 230300	
Centrifuge	DuPont Corporation	Model sorvall TC6	
shaker	Lab-line Instruments	Model 314-820	