

**Materials List for:****Isolation and Expansion of Human Glioblastoma Multiforme Tumor Cells Using the Neurosphere Assay**Hassan Azari<sup>1,2</sup>, Sebastien Millette<sup>1</sup>, Saeed Ansari<sup>1</sup>, Maryam Rahman<sup>1</sup>, Loic P. Deleyrolle<sup>1</sup>, Brent A. Reynolds<sup>1</sup><sup>1</sup>Department of Neurosurgery, University of Florida<sup>2</sup>Department of Anatomical Sciences, Shiraz University of Medical SciencesCorrespondence to: Hassan Azari at [Hassan.azari@neurosurgery.ufl.edu](mailto:Hassan.azari@neurosurgery.ufl.edu)URL: <https://www.jove.com/video/3633>

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**Materials**

Name	Type	Company	Catalog Number	Comments
NeuroCult NSC Basal Medium (Human)	Medium	Stem Cell Technologies	05750	
NeuroCult NSC Proliferation Supplements (Human)	Medium supplement	Stem Cell Technologies	05753	
%0.05 trypsin-EDTA	Reagent	GIBCO, by Life Technologies	25300-062	
*MEM	Reagent	GIBCO, by Life Technologies	41500-018	HEM component
*HEPES	Reagent	Sigma-Aldrich	H4034	HEM component
*Distilled water	Reagent	GIBCO, by Life Technologies	15230-147	
**DNase I	Reagent	Roche Group	104159	
**Soybean trypsin inhibitor	Reagent	Sigma-Aldrich	T6522	
Pen/Strep	Reagent	GIBCO, by Life Technologies	15140-122	
No. 10 scalpel blade	Surgical tool	BD Biosciences	371610	
Petri Dish	Culture ware	BD Biosciences	353003	
Small forceps	Surgical tools	Fine Science Tools	11050-10	
Cell strainer	Sieve	BD Biosciences	352340	
T25 flask	Culture ware	Nalge Nunc international	136196	
T80 flask	Culture ware	Nalge Nunc international	178905	
15 ml tubes	Culture ware	BD Biosciences	352096	
50 ml tubes	Culture ware	BD Biosciences	352070	
EGF	Growth factor	R&D Systems	2028-EG	
b-FGF	Growth factor	R&D Systems	3139-FB	
Heparin	Growth factor	Sigma-Aldrich	H4784	Reconstituted in PBS
* To make HEM, mix 1x10L packet of MEM and 160ml of 1M HEPES and bring the volume to 8.75 L using distilled water. Set the final PH to 7.4 and store it at 4°C.				
** To prepare trypsin inhibitor solution, first make 10 ml of DNase I solution (100 mg DNase dissolved in 100 ml of HEM) and then add 0.14 g of trypsin inhibitor to DNase solution and finally make the volume up to 1 Liter using HEM. Keep aliquots of the final products in -20°C freezer.				