

Materials List for:

Characterization of Functionally Associated miRNAs in Glioblastoma and their Engineering into Artificial Clusters for Gene Therapy

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Materials

Name	Company	Catalog Number	Comments
0.4% low melting temperature agarose	IBI Scientific	IB70058	
0.45 µM sterile filter unit	Merck Millipore	SLH033RS	
1.5 mL Microcentrifuge tube	Eppendorf	22431081	
6-Well plates	Greiner Bio-One	657160	
Athymic mice (FoxN1 nu/nu)	Envigo	069(nu)/070(nu/+)	
B-27 Supplement	Thermo Fisher Scientific	12587010	
Cell culture flask	Greiner Bio-One	660175	
Cell Scraper, 16cm	Sarstedt	83.1832	
Cesium 137 irradiator	JL Sheperd and Associates	Core Facility (Harvard Medical School)	
Chloroform	Sigma-Aldrich	439142-4L	
DMEM, high glucose, pyruvate	Thermo Fisher Scientific	11995040	
Dulbecco's phosphate-buffered saline	Gibco	14190144	
Eosin Y solution	Sigma-Aldrich	E4009	
Fetal Bovine Serum	Sigma-Aldrich	F9665	
Formalin solution	Sigma-Aldrich	HT501128	
GlutaMAX Supplement	Thermo Fisher Scientific	35050061	
HEK-293	American Type Culture Collecti	ATCC CRL-1573	
Hematoxylin solution	Sigma-Aldrich	1051750500	
Human primary glioma stem-like cells (GBM62)			Provided by Dr. E. A. Chiocca (Brigham and Women's Hospital, Boston, MA)
Human primary glioma stem-like cells (MGG4)			Provided by Dr. Hiroaki Wakimoto (Massachusetts General Hospital, Boston, MA)
Lentiviral vector pCDH-CMV-MCS-EF1-copGFP	System Biosciences	CD511B-1	
Lipofectamine 2000	Thermo Fisher Scientific	11668019	
Microcentrifuge refrigerated	Eppendorf	model no. 5424 R, cat. no.5404000138	
Mounting medium	Thermo Fisher Scientific	4112APG	
Nalgene High-Speed Polycarbonate Round Bottom Centrifuge Tubes	Thermo Fisher Scientific	3117-0380PK	
NanoDrop	Thermo Fisher Scientific	2000c	

Neural Progenitor cells (NPC)			Provided by Dr. Jakub Godlewski (Brigham and Women's Hospital, Boston, MA)
Neurobasal Medium	Thermo Fisher Scientific	21103049	
Nikon eclipse Ti motorized fluorescent microscope system	Nikon, Japan	14314	
Opti-MEM	Thermo Fisher Scientific	31985088	
PCR tubes	Sigma-Aldrich	CLS6571-960EA	
Penicillin-Streptomycin	Thermo Fisher Scientific	15140122	
Petri-Dishes 94/16	Greiner Bio-One	632180	
Poly-D-Lysine	Sigma- Aldrich	P4707	
Recombinant Human EGF	PeproTech	AF-100-15	
Recombinant Human FGF-basic	PeproTech	AF-100-18B	
Retinoic acid	Gibco	12587-010	
RNA Miniprep Kit	Direct-zol	R2050	
S1000 Thermal Cycler	Bio-Rad	1852196	
Small Animal Image-Guided Micro Irradiator	Xstrahal Life Sciences, UK	Core facility (Dana-Farber Cancer Institute, Boston, MA)	
Sorvall WX+ Ultracentrifuge	Thermo Fisher Scientific	75000100	
StemPro Accutase	Thermo Fisher Scientific	A1110501	
StepOne Real-Time PCR System	Applied Biosystems	4376357	
SterilGARD biosafety cabinet	The Baker Company	SG403A-HE	
Sucrose	Sigma-Aldrich	S9378	
T98-G	American Type Culture Collecti	ATCC CRL-1690	
TaqMan MicroRNA Reverse Transcription Kit	Thermo Fisher Scientific	4366596	
TaqMan Universal PCR Master Mix	Thermo Fisher Scientific	4324018	
Temozolomide	Tocris Bioscience	2706	
Tissue-Tek optimum cutting temperature	Fisher Scientific	NC9636948	
TRIzol Reagent	Thermo Fisher Scientific	15596026	Lysis reagent
U251-MG	American Type Culture Collecti	ATCC HTB-17	
U87-MG	American Type Culture Collecti	ATCC HTB-14	
ViraPower Lentivector Expression system	Thermo Fisher Scientific	K4970-00	
Water, HPLC grade	Fisher	W54	
Xylene	Sigma-Aldrich	534056	