

Materials List for:

Reliable Identification of Living Dopaminergic Neurons in Midbrain Cultures Using RNA Sequencing and TH-promoter-driven eGFP Expression

Beverley M. Henley¹, Bruce N. Cohen¹, Charlene H. Kim¹, Heather D. Gold¹, Rahul Srinivasan¹, Sheri McKinney¹, Purnima Deshpande¹, Henry A. Lester¹

¹Division of Biology and Biological Engineering, California Institute of Technology (Caltech)

Correspondence to: Beverley M. Henley at bhenley@caltech.edu

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Materials

Name	Company	Catalog Number	Comments
Papain	Worthington Biochemical Corporation	LS003126	
Hanks-balanced Salt Solution (HBSS), 1x	Gibco	14175-095	
Donor Equine Serum	Thermo Scientific	SH30074.03	
Bovine Serum Albumin (BSA)	Sigma	A7030-50G	
Medium: Neurobasal medium	Gibco	21103-049	
Culture media that contains a stabilized form of L-glutamine, L-alanyl-L-glutamine: GlutaMAX	Gibco	35050-061	0.5 mM final concentration.
L-Ascorbic acid	Sigma	A7506	
B27	Gibco	17504-044	50x stock solution, 1x final concentration.
35 mm glass bottom dishes	MatTek	P35GC-1.5-10-C	
Poly-L-Ornithine	Sigma	P4957	
Laminin	Sigma	L2020	Stored at -20 °C in 20 µL aliquots
Deoxyribonuclease I (DNase)	Sigma	DN25	
Blue pipette tips P1000	Sorenson Bioscience	Inc. 10130	
10 mm shallow Petri dish	VWR	25384-324	
37 °C Water bath			
37 °C, 5% humidity incubator			
16% paraformaldehyde (PFA)	Electron Microscopy Sciences	15710	
Triton X-100	Sigma	X100-500ML	
Donkey serum	Equitech	SD-0100HI	100% stock solution, 1% final concentration.
Standard Pattern surgical scissors	Fine Science Tools	14000-14	
Forceps - 2x3 teeth	Fine Science Tools	11022-14	
Forceps - Dumont #55	Fine Science Tools	11295-51	
Forceps - Dumont #5	Fine Science Tools	11252-23	
10x PBS, pH 7.4	Gibco	70011-044	
Dulbecco's Phosphate-buffered solution (DPBS) 1x	Gibco	14190-144	500 mL
21 G needle	BD PrecisionGlide Needle	305167	100 needles
Micropipette puller	Sutter Instrument	model P-87	
Micromanipulator	Sutter Instrument	MP-285	

Sequencing Kit: SMARTer Ultra Low RNA Kit for Illumina Sequencing	Clontech	634936	100 rxns, incl Advantage2PCR Kit
oligonucleotide (12 µM): SMARTer IIa oligonucleotide (12 µM)			From the SMARTer Kit
Reverse transcriptase (100 units)	SMARTscribe reverse transcriptase		From the SMARTer Kit
Primer 1	3' CDSIIa primer		From the SMARTer Kit
Primer 2	IS PCR primer		From the SMARTer Kit
50x 2 polymerase mix	50x Advantage 2 polymerase mix		From the SMARTer Kit
10x PCR buffer	10x Advantage 2 PCR buffer		From the SMARTer Kit
RNA Spikes	ThermoFisher	4456740	
PCR cooler rack	IsoFreeze PCR cooler rack		
DNA Sample Preparation Kit	(Illumina/Nextera) Nextera	FC-121-1030	24 Samples
PCR master mix	Nextera PCR master mix (NPM)		From the Nextera Kit
PCR primer cocktail (PPC)	Nextera PCR primer cocktail (PPC)		From the Nextera Kit
Fluorometer	The Qubit ThermoFisher	Q33216	
HS DNA BioAnalyzer kit	Agilent	5067-4626	110 rxns
Electrophoresis system	Agilent 2100 Bioanalyzer.	G2938C	
Magnetic beads: Agencourt AMPure	Beckman Coulter	A63880	5 mL
RNAse wipe: RNAse Zap wipes	Ambion	AM9786	Size 100 Sheets
Qubit ds HS Assay Kit	Molecular probes	Q32854	500 assays
Gel extraction kit: Qiaquick Gel Extraction Kit	Qiagen	28704	
Glass capillary tubing	(Kimax-51, 1.5 - 1.8 mm o.d.)		
Microforge	Narishige (or equivalent)		
Sequencer	Illumina HiSeq instrument		
GENSAT tyrosine hydroxylase-eGFP mouse strain		MMRRC stock number: 000292-UNC	Stock Tg(Th-EGFP)DJ76Gsat/ Mutant Mouse Regional Research Center