

Materials List for:

# Single-cell RNA-Seq of Defined Subsets of Retinal Ganglion Cells

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URL: <https://www.jove.com/video/55229>

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## Materials

Name	Company	Catalog Number	Comments
Ames' Medium	Sigma Aldrich	A1420-10X1L	
Sodium Bicarbonate	Sigma Aldrich	S8875	
K-gluconate	Spectrum Chemical	PO178	
EGTA	Sigma Aldrich	E4378	
HEPES	Sigma Aldrich	H3375	
Diethyl pyrocarbonate (DEPC)	Sigma Aldrich	D5758	
Alexa Fluor 594 Hydrazide	Invitrogen	A10442	
Collagenase	Worthington Biochemical	LS005273	
Hyaluronidase	Worthington Biochemical	LS002592	
Petri dish (35 mm diameter)	Thermo Fisher Scientific	153066	
Ophthalmologic scissors	Fine Science Tools	15000-00	
#5 Forceps	Fine Science Tools	11252-30	
Microplate Shaker	Fisher Scientific	13-687-708	
Glass Micropipette	Sutter	BF120-69-10	
Micropipette Puller	Sutter		P-1000 horizontal pipette puller
1 mL syringe	Fisher Scientific	14-823-2F	
Flexible tubing	Fisher Scientific	14-171	
TCL lysis buffer	Qiagen	1031576	Lysis Buffer 1
β-mercaptoethanol	Sigma Aldrich	M3148	
RNase-free Water	Qiagen	129112	
0.2 mL PCR tubes	Eppendorf	30124359	
Ethyl Alcohol, Pure	Sigma Aldrich	E7023	Ethanol
Analog Vortex Mixer	Thermo Fisher Scientific	02215365	Vortex
Mini Centrifuge	Thermo Fisher Scientific	05-090-100	
Agencourt RNAClean XP Beads	Beckman Coulter	A63987	RNA magnetic beads
MagnaBlot II Magnetic Separator	Promega	V8351	Magnetic stand
1.5 mL MCT Graduated Tubes	Thermo Fisher Scientific	05-408-129	
Smart-Seq v4 Ultra Low Input RNA Kit	Clontech	634888	Reagents for Reverse Transcription and PCR Amplification
10x Lysis Buffer			Lysis Buffer 2
5x Ultra Low First-strand Buffer			Buffer 1
3' SMART-Seq CDS Primer II A			Primer II
SMART-Seq v4 Oligonucleotide			Oligonucleotide

SMARTScribe Rverse Transcriptase			Reverse Transcriptase (RT)
2x SeqAmp PCR Buffer			PCR Buffer
PCR Primer II A			PCR Primer
SeqAmp DNA Polymerase			DNA Polymerase
Mastercycler pro S	Eppendorf	950030020	Thermocycler
Agencourt AMPure XP Beads	Beckman Coulter	A63881	DNA magnetic beads
2100 Bioanalyzer	Agilent Technologies	G2939AA	
HS Bioanalyzer Chips & Reagents	Agilent Technologies	5067-4626	
Qubit HS Assay Kit	Thermo Fisher Scientific	Q32851	For the calculation of sample concentrations
Qubit Assay Tubes	Thermo Fisher Scientific	Q32856	
Qubit 2.0 Fluorometer	Thermo Fisher Scientific	Q32866	
Nextera XT DNA Sample Preparation Kit	Illumina	FC-131-1024	Reagents for Tagmentation and Index Coupling
TD Buffer			Buffer 2
ATM			Tagmentation Mix
NT Buffer			Tagmentation Neutralizing Buffer
NPM			PCR Master Mix
Nextera XT Index Kit	Illumina	FC-131-1001	Indices for Tagmentation
N501			White 1
N502			White 2
N701			Orange 1
N702			Orange 2
HiSeq 2500	Illumina	SY-401-2501	For completing sequencing of samples