

Materials List for

Generation and Culture of Lingual Organoids Derived from Adult Mouse Taste Stem Cells

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Citation

Shechtman, L.A., Piarowski, C.M., Scott, J.K., Golden, E.J., Gaillard, D., Barlow, L.A. Generation and Culture of Lingual Organoids Derived from Adult Mouse Taste Stem Cells. *J. Vis. Exp.* (170), e62300, doi:10.3791/62300 (2021).

Date Published

April 5, 2021

DOI

10.3791/62300

URL

jove.com/video/62300

Materials

Name	Company	Catalog Number	Comments
Antibodies			
Alexa Fluor 546 Donkey anti Goat IgG	Molecular Probes	A11056, RRID: AB_142628	1:2000
Alexa Fluor 546 Goat anti Rabbit IgG	Molecular Probes	A11010, RRID:AB_2534077	1:2000
Alexa Fluor 568 Goat anti Guinea pig IgG	Invitrogen	A11075, RRID:AB_2534119	1:2000
Alexa Fluor 647 Donkey anti Rabbit IgG	Molecular Probes	A31573, RRID:AB_2536183	1:2000
Alexa Fluor 647 Goat anti Rat IgG	Molecular Probes	A21247, RRID:AB_141778	1:2000
DAPI (for FACS)	Thermo Fischer	62247	
DAPI (for immunohistochemistry)	Invitrogen	D3571, RRID:AB_2307445	1:10000
Goat anti-CAR4	R&D Systems	AF2414, RRID:AB_2070332	1:50
Guinea pig anti-KRT13	Acris Antibodies	BP5076, RRID:AB_979608	1:250
Rabbit anti-GUSTDUCIN	Santa Cruz Biotechnology Inc.	sc-395, RRID:AB_673678	1:250
Rabbit anti-NTPDASE2	CHUQ	mN2-36LI6, RRID:AB_2800455	1:300
Rat anti-KRT8	DSHB	TROMA-IS, RRID: AB_531826	1:100
Equipment			
2D rocker	Benchmark Scientific Inc.	BR2000	
3D Rotator	Lab-Line Instruments	4630	
Big-Digit Timer/Stopwatch	Fisher Scientific	S407992	
Centrifuge	Eppendorf	5415D	
CO2 tank	Airgas	CD USP50	
FormaTM Series 3 Water Jackeod CO2 Incubator	Thermo Scientific	4110	184 L, Polished Stainless Steel
Incucyte	Sartorius	Model: S3	Cancer Center Cell Technologies Shared Resource, University of Colorado Anschutz Medical Campus

MoFlo XDP100	Cytomation Inc	Model: S13211997	Gates Center Flow Cytometry Core, University of Colorado Anschutz Medical Campus
Orbital Shaker	New Brunswick Scientific	Excella E1	
Real-Time PCR System	Applied Biosystems	4376600	
Refrigerated Centrifuge	Eppendorf	5417R	
Spectrophotometer	Thermo Scientific	ND-1000	
Stereomicroscope	Zeiss	Stemi SV6	
Thermal Cycler	Bio-Rad	580BR	
Vortex	Fisher Scientific	12-812	
Water bath	Precision	51220073	
Media			
A83 01	Sigma	SML0788-5MG	Stock concentration 10 mM, final concentration 500 nM
Advanced DMEM/F12	Gibco	12634-010	
B27 Supplement	Gibco	17504044	Stock concentration 50X, final concentration 1X
Gentamicin	Gibco	15750-060	Stock concentration 1000X, final concentration 1X
Glutamax	Gibco	35050061	Stock concentration 100X, final concentration 1X
HEPES	Gibco	15630080	Stock concentration 100X, final concentration 1X
Murine EGF	Peptotech	315-09-1MG	Stock concentration 500 µg/mL, final concentration 50 ng/mL
Murine Noggin	Peptotech	250-38	Stock concentration 50 µg/mL, final concentration 25 ng/mL
N-acetyl-L-cysteine	Sigma	A9165	Stock concentration 0.5 M, final concentration 1 mM
Nicotinamide	Sigma	N0636-100g	Stock concentration 1 M, final concentration 1 mM
Pen/Strep	Gibco	15140-122	Stock concentration 100X, final concentration 1X
Primocin	InvivoGen	ant-pm-1	Stock concentration 500X, final concentration 1X
SB202190	R&D Systems	1264	Stock concentration 10 mM, final concentration 0.4 µM
WRN Conditioned media			Received from Dempsey Lab (AMC Organoid and Tissue Modeling Share Resource). Derived from L-WRN (ATCC® CRL-3276™) cells
Y27632 dihydrochloride 10ug	APEX BIO	A3008-10	Stock concentration 10 mM, final concentration 10 µM
Other			
1 ml TB Syringe	BD Syringe	309659	
2-Mercaptoethanol, min. 98%	Sigma	M3148-25ML	β-mercaptoethanol
2.0 mL Microcentrifuge Tubes	USA Scientific	1420-2700	
48-well plates	Thermo Scientific	150687	
5 3/4 inch Pasteur Pipets	Fisherbrand	12-678-8A	
Albumin from bovine serum (BSA)	Sigma Life Science	A9647-100G	
Buffer RLT Lysis buffer	QIAGEN	1015750	
Cell Recovery Solution	Corning	354253	
Cohan-Vannas Spring Scissors	Fine Science Tools	15000-02	

Collagenase from Clostridium histolyticum, type I	Sigma Life Science	C0130-1G	
Cultrex RGF BME, Type 2, Pathclear	R&D Systems	3533-005-02	Matrigel
Dispase II (neutral protease, grade II)	Sigma-Aldrich (Roche)	4942078001	
Disposable Filters	Sysmex	04-0042-2316	
Dulbecco's Phosphate Buffered Saline pH 7.4 (1X) (Ca ²⁺ & Mg ²⁺ free)	Gibco	10010-023	
Dulbecco's Phosphate Buffered Saline with Ca ²⁺ & Mg ²⁺	Sigma Life Sciences	D8662-500ML	
Dumont #5 Forceps	Fine Science Tools	11252-30	
EDTA, 0.5M (pH 8.0)	Promega	V4231	
Elastase Lyophilized	Worthington Biochemical	LS002292	
Extra Fine Bonn Scissors	Fine Science Tools	14084-08	
Fetal Bovine Serum (FBS)	Gibco	26140-079	
Fluoromount G	SouthernBiotech	0100-01	
HEPES Solution	Sigma Life Science	H3537-100ML	
HyClone Trypsin 0.25% + EDTA	Thermo Scientific	25200-056	
iScript cDNA Synthesis Kit	Bio-Rad	1706691	
Modeling Clay, Gray	Sargent Art	22-4084	
Needle	BD Syringe	305106	
Normal Donkey Serum	Jackson ImmunoResearch	017-000-121	
Normal Goat Serum	Jackson ImmunoResearch	005-000-121	
Paraformaldehyde	Sigma-Aldrich	158127	
PowerSYBR Green PCR Master Mix	Applied Biosystems	4367659	
RNeasy Micro Kit	QIAGEN	74004	
Safe-Lock Tubes 1.5 mL	Eppendorf	022363204	
Sodium Chloride	Fisher Chemical	7647-14-5	
Sodium Phosphate dibasic anhydrous	Fisher Chemical	7558-79-4	
Sodium Phosphate monobasic anhydrous	Fisher Bioreagents	7558-80-7	
SuperFrost Plus Microscope Slides	Fisher Scientific	12-550-15	
Surgical Scissors - Sharp	Fine Science Tools	14002-14	
Triton X-100	Sigma Life Science	T8787-100ML	
VWR micro cover glass	VWR	48366067	22x22mm