

Materials List for:

Cultivate Primary Nasal Epithelial Cells from Children and Reprogram into Induced Pluripotent Stem Cells

Ashley Ulm¹, Christopher N. Mayhew², Jason Debley³, Gurjit K. Khurana Hershey⁴, Hong Ji^{1,4}

¹Pyrosequencing Core, Cincinnati Children's Hospital

²Division of Developmental Biology, Cincinnati Children's Hospital

³Division of Pulmonary Medicine, Seattle Children's Hospital

⁴Division of Asthma Research, Cincinnati Children's Hospital

Correspondence to: Hong Ji at Hong.Ji@cchmc.org

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Materials

Name	Company	Catalog Number	Comments
15 ml conical	Fisher Scientific	14-959-49D	Protocol Step 1.1.
BEGM	Lonza	CC-3170	Protocol Step 1.1.
Penn/Strep/Fungicide	Life Technologies	15240-062	Protocol Step 1.1.
Penn/Strep	Life Technologies	15140-122	Protocol Step 4.a.
cytosoft cytology brush	Fisher Scientific	22-263-357	Protocol Step 1.2.
trypan blue	Fisher Scientific	MT-25-900-CI	Protocol Step 2.1.
hemacytometer	Fisher Scientific	02-671-54	Protocol Step 2.1.
PBS	Fisher Scientific	BP2438-4	Protocol Step 2.2.
Cytology Funnel Clips	Fisher Scientific	10-357	Protocol Step 2.2.
cytospin funnel	Fisher Scientific	23-640-320	Protocol Step 2.2.
Cytospin 4	Fisher Scientific	A78300003	Protocol Step 2.2.
blank slide	Fisher Scientific	S95933	Protocol Step 2.2.
hema 3 stain kit	Fisher Scientific	22-122-911	Protocol Step 2.2.
Bovine Dermal Collagen, type 1	Life Technologies	A1064401	Protocol Step 3.2.
T25 flask	Fisher Scientific	08-772-45	Protocol Step 3.3.
Trypsin	Lonza	CC-5012	Protocol Step 5.2.
Trypsin Neutralizing Solution	Lonza	CC-5002	Protocol Step 5.2.
Fetal Bovine Serum (FBS), heat sterilized at 65 °C for 30 min	Sigma-Aldrich	F2442	Protocol Step 5.5.
Dimethyl sulfoxide Hybri-Max™, sterile-filtered, BioReagent, suitable for hybridoma, ≥99.7%	Sigma-Aldrich	D2650	Protocol Step 5.5.
polycistronic lentivirus*	e.g. Millipore	SCR511	Protocol Step 6.4. A commercial source of reprogramming vector is listed. We routinely use the 4-in-1 plasmid reported by Voelkel et al (PMID: 20385817) to generate VSV-G-pseudotyped polycistronic reprogramming lentivirus in-house. This plasmid can be obtained by contacting
polybrene	Santa Cruz Biotechnology	sc-134220	Protocol Step 6.4.
Irradiated CF1 MEFs	GlobalStem	GSC-6301G	Protocol Step 6.4.
hESC media	See recipe included in protocol		Protocol Step 6.11.

SB431542	Stemgent	04-0010	Protocol Step 6.11.
PD0325901	Stemgent	04-0006	Protocol Step 6.11.
Thiazovivin	Stemgent	04-0017	Protocol Step 6.11.
hESC-qualified Matrigel	BD Biosciences	354277	Protocol Step 6.13.
Corning plate, 6 well	Fisher Scientific	08-772-1B	Protocol Step 6.13.
mTeSR1	StemCell	5850	Protocol Step 6.13.
250 ml disposable filter flask (0.22 μ m)	Fisher	SCGP-U02-RE	
dispase	StemCell	7923	Protocol Step 7.3.
DMEM/F12	Life Technologies	11320-033	Protocol Step 7.3.
cell lifter	Fisher Scientific	08-100-240	Protocol Step 7.4.
hESC Media**			Protocol Step 6.11. components should be mixed and then filter sterilized. Media can be kept at 4 °C for up to two weeks. When warming media, do not leave at 37 °C longer than 15 min
DMEM-F12 50/50 media	Invitrogen	11330-032	Final Concentration
KO replacement serum (KO-SR)	Invitrogen	10828-028	0.2
200 mM L-glutamine	Invitrogen	25030-081	1 mM
55 mM β -mercaptoethanol	Invitrogen	21985-023	0.1 mM
100x non-essential amino acids	Invitrogen	11140-050	1x
2 μ g/ml Basic-Fibroblast Growth Factor (b-FGF)	Invitrogen	13256-029	4 ng/ml