

Materials List for

# Generation of Induced Pluripotent Stem Cells from Turner Syndrome (45XO) Fetal Cells for Downstream Modelling of Neurological Deficits Associated with the Syndrome

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## Citation

Veerasubramanian, N., Karthikeyan, V., Hegde, S., Dhanushkodi, A., Parveen, S. Generation of Induced Pluripotent Stem Cells from Turner Syndrome (45XO) Fetal Cells for Downstream Modelling of Neurological Deficits Associated with the Syndrome. *J. Vis. Exp.* (178), e62240, doi:10.3791/62240 (2021).

## Date Published

December 4, 2021

## DOI

10.3791/62240

## URL

jove.com/video/62240

## Materials

Name	Company	Catalog Number	Comments
0.15% trypsin	Thermo Fisher Scientific	27250018	G Banding
2-mercaptoethanol	Thermo Fisher Scientific	21985023	Pluripotency and Embryoid body medium
4', 6 diamidino-2-phenylindole	Sigma Aldrich	D8417	Immunocytochemistry
Activin A	Sigma Aldrich	SRP3003	Differentiation assays
Alkaline Phosphatase Live Stain	Thermo Fisher Scientific	A14353	AP staining
AMAXA Nucleofector II	Lonza	-	Nucleofection
AmnioMAX II complete media	Thermo Fisher Scientific, Gibco	11269016	Medium specific for foetal chorionic villi cell cultures
Ampicillin	HiMedia	TC021	Plasmid purification
Anti Mouse IgG (H+L) Alexa Fluor 488	Invitrogen	A11059	Immunocytochemistry
Anti Rabbit IgG (H+L) Alexa Fluor 488	Invitrogen	A11034	Immunocytochemistry
Anti Rabbit IgG (H+L) Alexa Fluor 546	Invitrogen	A11035	Immunocytochemistry
Antibiotic-Antimycotic	Thermo Fisher Scientific, Gibco	15240096	Contamination control
Anti-E-Cadherin	BD Biosciences	610181	Immunocytochemistry
Anti-Nanog	BD Biosciences	560109	Immunocytochemistry
Anti-OCT3/4	BD Biosciences	611202	Immunocytochemistry
Anti-SOX17	BD Biosciences	561590	Immunocytochemistry
Anti-SOX2	BD Biosciences	561469	Immunocytochemistry
Anti-SSEA4	BD Biosciences	560073	Immunocytochemistry
Anti-TRA 1-81	Millipore	MAB4381	Immunocytochemistry

basic Fibroblast Growth Factor[FGF2]	Sigma Aldrich	F0291	Pluripotency medium
Bone Morphogenetic Factor 4	Sigma Aldrich	SRP3016	Differentiation assays
Bovine Serum Albumin	Sigma Aldrich	A3059	Blocking
Collagen Human Type IV	BD Biosciences	354245	Differentiation assays
Collagenase blend	Sigma Aldrich	C8051	Digestion of foetal chorionic villi
Dexamethasone	Sigma Aldrich	D4902	Differentiation assays
DMEM F12	Thermo Fisher Scientific	11320033	Differentiation assays
FastDigest EcoR1	Thermo Scientific	FD0274	Restriction digestion
Fibronectin	Sigma Aldrich	F2518	Differentiation assays
Giemsa Stain	HiMedia	S011	G Banding
Glacial Acetic Acid	HiMedia	AS001	Fixative for karyotyping
Glucose	Sigma Aldrich	G7528	Differentiation assays
GlutaMAX	Thermo Fisher Scientific	35050061	Pluripotency and Embryoid body medium
Heparin sodium	Sigma Aldrich	H3149	Differentiation assays
Insulin solution human	Sigma Aldrich	I9278	Differentiation assays
Insulin Transferrin Selenite	Sigma Aldrich	I1884	Differentiation assays
KAPA HiFi PCR kit	Kapa Biosystems	KR0368	OriP, EBNA1 PCR
KaryoMAX Colcemid	Thermo Fisher Scientific	15210040	Mitotic arrest for karyotyping
KnockOut DMEM	Thermo Fisher Scientific	10829018	Pluripotency and Embryoid body medium
KnockOut Serum Replacement	Thermo Fisher Scientific	10828028	Pluripotency and Embryoid body medium
Luria Bertani agar	HiMedia	M1151F	Plasmid purification
Matrigel	BD Biosciences	356234	Differentiation assays
MEM Non-essential amino acids	Thermo Fisher Scientific	11140035	Pluripotency and Embryoid body medium
Methanol	HiMedia	MB113	Fixative for karyotyping
Myosin ventricular heavy chain $\alpha/\beta$	Millipore	MAB1552	Immunocytochemistry
NHDF Nucleofector Kit	Lonza	VAPD-1001	Nucleofection
Paraformaldehyde (PFA)	Sigma Aldrich	P6148	Fixing cells
pCXLE-hOCT3/ 4-shp53-F	Addgene	27077	Episomal reprogramming Plasmid
pCXLE-hSK	Addgene	27078	Episomal reprogramming Plasmid
pCXLE-hUL	Addgene	27080	Episomal reprogramming Plasmid
Penicillin Streptomycin	Thermo Fisher Scientific,	15070063	Pluripotency and Embryoid body medium
Phalloidin- Tetramethylrhodamine B isothiocyanate	Sigma Aldrich	P1951	Immunocytochemistry
Phosphate buffered saline	Sigma Aldrich	P4417	1 X PBS 1 tablet of PBS dissolved in 200mL of deionized water and sterilized by autoclaving Storage: Room temperature. PBST- 0.05% Tween 20 in 1X PBS. Storage: Room temperature.
Plasmid purification Kit- Midi prep	QIAGEN	12143	Plasmid purification
Potassium Chloride Solution	HiMedia	MB043	Hypotonic solution for karyotyping
QIAamp DNA Blood Kit	Qiagen	51104	Genomic DNA isolation
RPMI 1640	Thermo Fisher Scientific	11875093	Hepatocyte differentiation medium
Sodium Citrate	HiMedia	RM255	Hypotonic solution for karyotyping
Triton X-100	HiMedia	MB031	Permeabilisation

Trypsin-EDTA (0.05%)	Thermo Fisher Scientific, Gibco	25300054	Subculture of foetal chorionic villi fibroblasts
Tween 20	HiMedia	MB067	Preparation of PBST
$\beta$ III tubulin	Sigma Aldrich	T8578	Immunocytochemistry
Y-27632 dihydrochloride	Sigma Aldrich	Y0503	Differentiation assays