

Materials List for:

Human Pluripotent Stem Cell Based Developmental Toxicity Assays for Chemical Safety Screening and Systems Biology Data Generation

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URL: <https://www.jove.com/video/52333>

DOI: [doi:10.3791/52333](https://doi.org/10.3791/52333)

Materials

Name	Company	Catalog Number	Comments
DMEM/F-12	Life Technologies	11320082	Dulbecco's Modified Eagle Medium:Nutrient Mixture F-12
KOSR	Life Technologies	10828028	Knockout Serum Replacement
GlutaMAX	Life Technologies	35050061	GlutaMAX supplement
NEAA	Life Technologies	11140050	MEM Nonessential Amino Acids Solution
DPBS	Life Technologies	14190-0144	Dulbecco's Phosphate-Buffered Saline, without calcium, without magnesium
mTeSR medium	Stemcell Technologies	5850	
Pluronic F-127	Sigma	P2443-250G	
V bottom plate	VWR	734-0483	Plate,Microwell,V BTTM,96 Well,Sterile 1 * 50 ST
V bottom plate lid	VWR	634-0011	Lid, Microtitre plates, Cond. Ring 1 * 50 ST
Pen/Strep	Life Technologies	15140-122	Penicillin-Streptomycin, Liquid
Distilled Water	Life Technologies	15230-089.	Sterile Distilled Water
Human FGF-2 (bFGF)	Millipore	GF003AF-100UG	Fibroblast Growth Factor basic, human recombinant, animal-free
Filter 0.22 µm	Millipore	SCGPU02RE	Stericup-GP, 0.22 µm, polyethersulfone, 250 ml, radio-sterilized
StemPro EZPassage™ Disposable	Invitrogen	23181010	
BD Matrigel™, hESC qualified Matrix	Stemcell Technologies	354277	5 ml vial
DMSO	Sigma	D-2650	
RNAlater Stabilization Solution	Life Technologies	AM7020	It stabilizes and protect the RNA integrity in unfrozen samples.
70 µm Cell Strainer	Becton Dickinson	352350	Cell strainer with 70 µm Nylon mesh
35 µm Lid cell strainer, 5 ml tube	Becton Dickinson	352235	5 ml polystyrene round bottom test tube, with a cell strainer cap (35 µm)

50 ml sterile Polypropylene tube	Greiner Bio-One	227261	50 ml Polypropylene tube with conical bottom, Sterile
T75 flask	Greiner Bio-One	658175	CELLSTAR Filter Cap Cell Culture 75 cm ² Flasks
TRlzol	Life Technologies	10296010	
96 well optical bottom plates	Thermo Scientific	165305	
CellTiter-Blue	Promega	G8081	
Accutase	PAA	L11-007	
Apotransferin	Sigma-Aldrich	T-2036	
Dispase	Worthington Biochemicals	LS002104	
Dorsomorphin	Tocris Bioscience	3093	
EDTA	Roth	8043.2	
FBS	PAA	A15-101	
FGF-2	R&D Systems	233-FB	
Gelatine	Sigma-Aldrich	G1890-100G	
Glucose	Sigma-Aldrich	G7021-100G	
GlutaMAX	Gibco Invitrogen	35050-038	
HEPES	Gibco Invitrogen	15630-056	
Insulin	Sigma-Aldrich	I-6634	
Knockout DMEM	Gibco Invitrogen	10829-018	
Matrigel	BD Biosciences	354234	
Noggin	R&D Systems	719-NG	
PBS	Biochrom AG	L1825	
Progesteron	Sigma-Aldrich	P7556	
Putrescine	Sigma-Aldrich	P-5780	
ROCK inhibitor Y-27632	Tocris Biosciences	1254	
SB431542	Tocris Biosciences	1614	
SDS	Bio-Rad	161-0416	
Selenium	Sigma-Aldrich	S-5261	
β-Mercaptoethanol	Gibco Invitrogen	31350-010	

Name	Company	Catalog Number	Comments
List of Kits			
RNeasy Mini Kit (250)	QIAGEN	74106	
GeneChip Hybridization, Wash, and Stain Kit	Affymetrix	900721, 22, 23	This kit provides all reagents required for hybridization wash and staining of microarrays.
Rnase-Free DNase Set	QIAGEN	79254	

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List of equipment			
Inverted microscope	Olympus		IX71
Genechip Hybridisation Oven - 645	Affymetrix		
Genechip Fluidics Station-450	Affymetrix		
Affymetrix Gene-Chip Scanner-3000-7 G	Affymetrix		
Spectramax M5	Molecular Devices		

Name	Company	Catalog Number	Comments
List of softwares			
Prism 4			
Affymetrix GCOS			
Partek Genomic Suite 6.25			
Online tools for Functional annotation DAVID Onto-tools Intelligent Systems and Bioinformatics Laboratory			