

Materials List for:

# Efficient Neural Differentiation using Single-Cell Culture of Human Embryonic Stem Cells

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URL: <https://www.jove.com/video/60571>

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## Materials

Name	Company	Catalog Number	Comments
35 mm m-dishes	ibidi	81156	Cell culture dish
6-well plates	Corning	3516	
Accutase	Innovative Cell Technologies	AT104-500	Cell detachment solution
Activin A	R&D system	338-AC-050	
Ascorbic Acid	Sigma Aldrich	A4403	
B27 supplement	Thermo Fisher	17504044	
B27 supplement (-Vit A)	Thermo Fisher	12587010	
BDNF	Applied Biological Materials	Z100065	
bFGF	Peprotech	100-18C	
Centrifuge	DAMON/ICE	428-6759	
CO2 incubator	Thermo Fisher	4110	
Corning hESC-qualified Matrix (Magrigel)	Corning	354277	Basement membrane matrix (used for most of the protocol here)
Cryostor CS 10	Stemcell Technologies	7930	Cell freezing solution
Dispase	Stemcell Technologies	7923	
DMEM	Thermo Fisher	10569-010	
DMEM/F12	Thermo Fisher	10565-018	
Dorsomorphin	Tocris	3093	
EGF	Peprotech	AF-100-16A	
Fetal Bovine Serum	Fisher Scientific	SH3007003HI	
FGF8	Applied Biological Materials	Z101705	
GDNF	Applied Biological Materials	Z101057	
Geltrex matrix	Thermo Fisher	A1569601	Basement membrane matrix
GlutaMax	Thermo Fisher	35050061	Glutamine supplement, 100X
H9 (WA09) human embryonic stem cell line	WiCell	WA09	
Heregulin b-1	Peprotech	100-3	
IGF	Peprotech	100-11	
Knockout DMEM	Thermo Fisher	10829018	
Knockout Serum Replacement	Thermo Fisher	10828028	
Laminin	Sigma Aldrich	L2020	
mTeSR1	Stemcell Technologies	85850	hESC culture medium
N2 supplement	Thermo Fisher	17502001	
NEAA	Thermo Fisher	11140050	

Neurobasal	Thermo Fisher	21103049	
Poly-L-ornithine	Sigma Aldrich	P3655	
ROCK inhibitor	Tocris	1254	
SB431542	Tocris	1614	
SHH	Applied Biological Materials	Z200617	
Stemdiff Neural Progenitor medium	Stemcell Technologies	5833	NPC expansion medium