

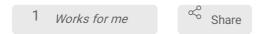


Sep 06, 2022

Standard operating procedure for the isolation of genetically engineered hPSCs clones in a high-throughput way

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dx.doi.org/10.17504/protocols.io.b4mmqu46



ABSTRACT

This collection describes a standard procedure for isolating single human pluripotent stem cell (hPSC) clones in a high-throughput way. This collection follows nucleofection of hPSCs as described in detail in the collection "Nucleofection (Amaxa) and electroporation (Biorad) of hPSCs;" dx.doi.org/10.17504/protocols.io.b4qnqvve

Collection overview

Seeding nucleofected hPSCs in 96-well plates using limited dilution Duplicating 96-well plate-cultured hPSCs clones Subcloning of genotype-confirmed hPSCs clones

General notes

1. Throughout these protocols, the term hPSC is used to collectively refer to both hiPSCs and hESCs. All described procedures have been tested and work equally well for hiPSCs and hESCs.

DOI

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COLLECTION CITATION

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KEYWORDS

ASAPCRN

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Feb 03, 2022

LAST MODIFIED

Sep 06, 2022

COLLECTION INTEGER ID

57741

MATERIALS TEXT



Α	В	С
Item	Vendor	Catalog #
DMEM/F12	Thermo	11320082
	Fisher	
DPBS w/o	Corning	MT21031CV
Calcium and magnesium (DPBS)		
Fetal Bovine	Corning	35-011-CV
Serum (FBS)		
Knockout Serum Replacement	Thermo	10828-028
	Fisher	
L-Glutamine	Sigma	G8540
Penicillin & Streptomycin (100X)	Thermo	15140163
	Fisher	
MEM Non-Essential Amino Acids	Thermo	11140050
(100X)	Fisher	
Heat Stable Recombinant Human	Thermo	PHG0360
FGF2 *	Fisher	
Y-27632	Chemdea	CD0141
2-Mercaptoethanol	Sigma	M3148
0.25% Trypsin with EDTA	Thermo	25200114
(Trypisin)	Fisher	
DMSO	Fisher	BP231-100
	Scientific	
Proteinase K	Sigma	P6556

^{*}While we prefer Heat Stable Recombinant Human FGF2, we also have used regular FGF2

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