

Characterization of hPSC

Cell Line Name	hFSiPS3-1		
Type of Cell Line	hiPSC		
Depositor (Institution)	Korea National Institute of Health		
Passage #	p19*		
Day of Cell Freezing	20221106		
Analysis	Result	Passage#	Day of analysis
Cell viability	Pass (74.3±2.3%)	p19	20221119
Authentication (STR)	Pass	p20	20221129
Mycoplasma test (PCR)	Pass	p20	20221227
Cell attachment & colony morphology	Pass	p20	20221119
Microbial contamination test (Virus, Fungi, bacteria)	Pass	p20	20221118
Karyotype (G-banding)	46,XY	p20	20221205
CNV analysis (CNV_Chip)	Not-detected	p30	20221202
Stem Cell Marker Expression			
· AP staining	Pass (Positive)	p19	20221109
· ICC	Pass (Positive)	p19	20221226
· qRT-PCR	Pass (Positive)	p19	20221221
Differentiation Marker Expression			
· EB formation	Pass (EB14d)	p19	20221118
· qRT-PCR	Pass (Positive)	p19	20221221
· Teratoma formation	Pass (Three-germ layer)	p30	20291231
HLA genotype	HLA-A *02:07 *24:02g HLA-B *13:02 *35:01 HLA-DRB1 *01:01 *07:01	p19	20221123
ABO genotype	AA	p19	20221124

* Freezing media : Stem-cellbanker (AMSBIO, Cat# I 1894)

Cell Culture Condition

- Feeder/matrix Vitronectin (Gibco, A14700)
- Media TeSR-E8 (Stem Cell Technol, #05990)
- Passage (Cell dissociation) EDTA/Gentle Cell Dissociation Reagent (Stem cell Technol, 07174)

Description of the hPSC

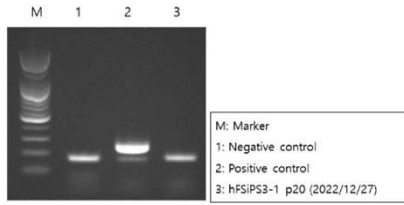
- Parental Cell human dermal fibroblast (ScienceCell, #2320)
- Reprogram Sendai virus (CytoTune-iPS Reprogramming kit, Invitrogen)
OCT3/4, SOX2, KLF4, c-MYC

※ hFSiPS1 subline

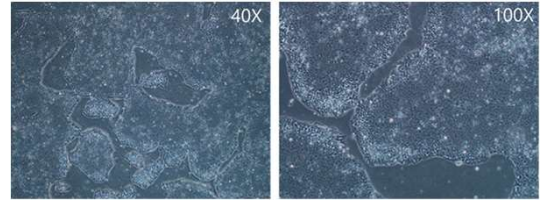
Reference

Uhm KO et al. Generation of human induced pluripotent stem cell lines from human dermal fibroblasts using a non-integration system. Stem Cell Res . 2017 May;21:13-15.

Mycoplasma contamination test



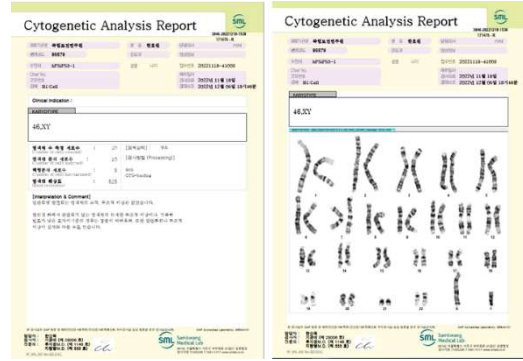
Cell attachment and morphology



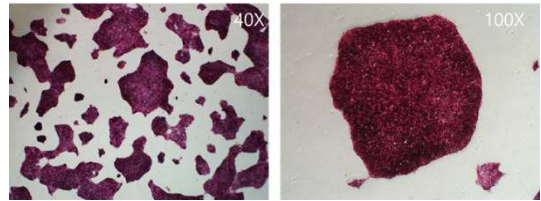
Microbial contamination test

검사항목	결과	비고
항생제 감수성 검사	음성	
항진균제 감수성 검사	음성	
항바이러스제 감수성 검사	음성	
항박테리얼 감수성 검사	음성	
항지렁이 감수성 검사	음성	
항곰팡이 감수성 검사	음성	
항세균 감수성 검사	음성	
항바이러스 감수성 검사	음성	
항지렁이 감수성 검사	음성	
항곰팡이 감수성 검사	음성	
항세균 감수성 검사	음성	

Karyotype

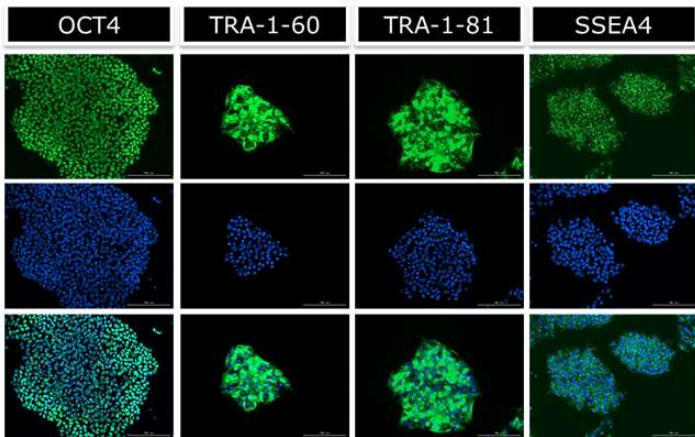


AP staining

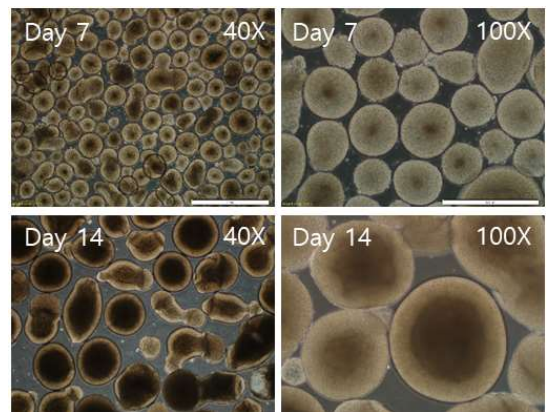


Stem cell marker gene expression

<ICC>

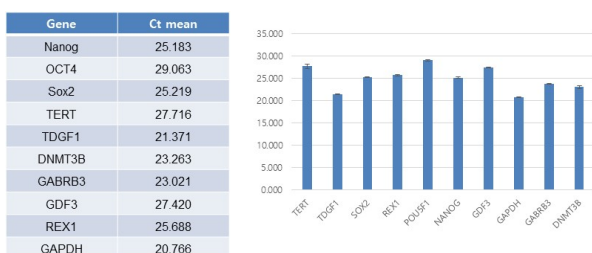


EB formation



Stem cell marker gene expression

<qRT-PCR>



Differentiation marker gene expression

<qRT-PCR>

