

Characterization of hPSC

Cell Line Name	hAdMSiPS1			
Type of Cell Line	hiPSC			
Depositor (Institution)	Korea National Institute of Health			
Passage #	p16*			
Day of Cell Freezing	20180420*			
Analysis	Result	Passage#	Day of analysis	
Cell viability	Pass (67.5±3.6%)	p17	20180619	
Authentication (STR)	Pass	p18	20180709	
Mycoplasma test (PCR)	Pass	p17	20180626	
Cell attachment and colony morphology	Pass	p10	20151220	
Microbial contamination test (Virus, Fungi, bacteria)	Pass	p18	20180709	
Karyotype (G-banding)	46,XX	p18	20180711	
CNV analysis (CNV_Chip)	Not-detected	p18	20180711	
Stem Cell Marker Expression				
· AP staining	Pass (Positive)	p10	20151110	
· ICC	Pass (Positive)	p12	20170820	
· qRT-PCR	Pass (Positive)	p12	20180226	
Differentiation Marker Expression				
· EB fomatation	Pass (EB14d)	p19	20180717	
· qRT-PCR	Pass (Positive)	p19	20180722	
· Teratoma	Pass (three-germ layer)	p13	20160105	

* Freezing media : mFreSR (Stem Cell Technol, ST#05855)

Cell Culture Condition

- Feeder/matrix STO (mouse embryonic fibroblast; ATCC CRC-1503)
- Media hPS media (DMEM/F12 supplemented KSR and FGF2)
- Passage method Enzymatic method.: Dispase (Gibco, #17015-041)

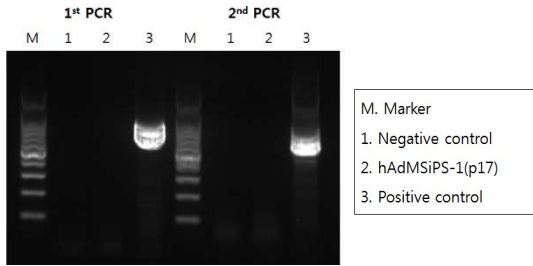
기탁자 제공 정보

- Parental Cell Adipose Derived Mesenchymal Stem Cell (provide by Seoul National University)
- Reprogram Sendai virus (CytoTune-iPS Reprogramming kit, Invitrogen)
OCT3/4, SOX2, KLF4, c-MYC

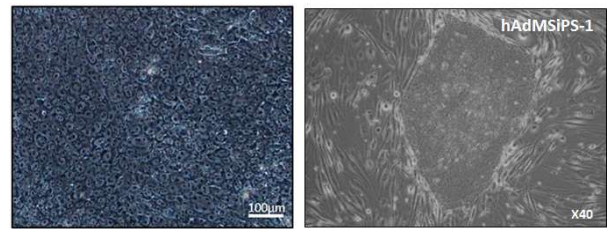
Reference

Choi HY et al. Generation of a human induced pluripotent stem cell line, KSCBi003-A, from human adipose tissue-derived mesenchymal stem cells using a chromosomal integration-free system. Stem Cell Research 31 (2018) 1–4

Mycoplasma contamination test



Cell attachment & Morphology



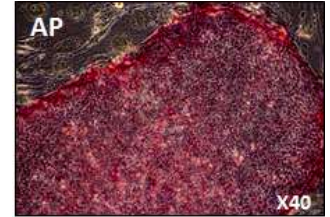
Microbial contamination test

항생제	항생제	항생제	항생제	항생제	항생제
Streptococcus	Staphylococcus	Enterococcus	Escherichia coli	Salmonella	Shigella
...

Karyotype

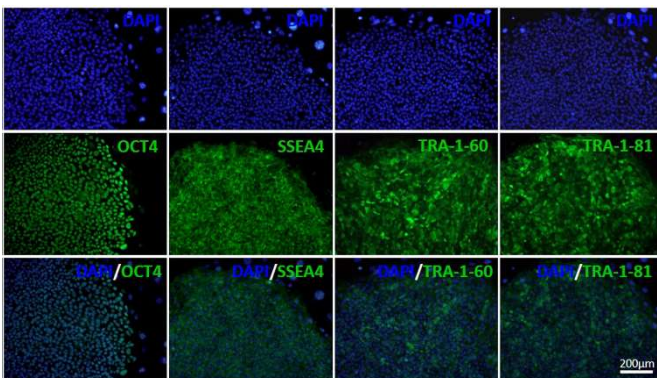


AP staining



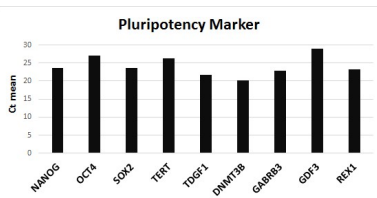
Stem cell marker gene expression

<ICC>

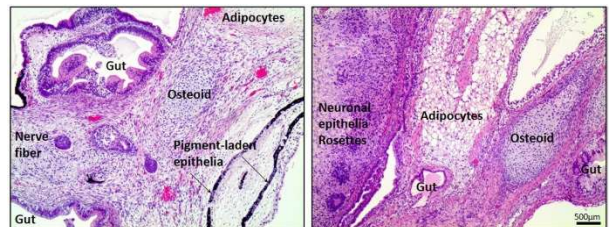


<qRT-PCR>

Gene	Ct mean
NANOG	23.58
OCT4	27.02
SOX2	23.56
TERT	26.19
TDGF1	21.61
DNMT3B	20.19
GABRB3	22.85
GDF3	28.99
REX1	23.24

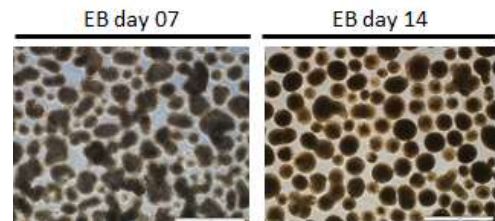


Teratoma formation



Differentiation marker gene expression

<EB formation>



<qRT-PCR>

Gene	Ct Mean
GAPDH	18.928
PAX6	20.395
SOX1	31.384
HNF3B	33.133
AFP	25.805
T	30.893
MYOG	34.978

