

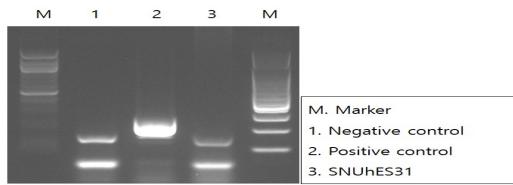
Characterization of hPSC

Cell Line Name	SNUhES31		
Type of Cell Line	hESC		
Depositor (Institution)	Seoul National University		
Passage #	p24*		
Day of Cell Freezing	20210520		
Analysis	Result	Passage#	분석일자
Cell viability	Pass (80.7±5.9%)	p25	20210528
Authentication (STR)	Pass	p27	20210608
Mycoplasma test (PCR)	Pass	p26	20210609
Microbial contamination test (Virus, Fungi, bacteria)	Pass	p27	20210608
Karyotype (G-banding)	46,XY	p27	20210608
Colony morphology	Pass	p25	20210519
Attached cell number after thawing	Pass (Day4, 1.23x10 ⁵ cells/ml)	p26	20130602
CNV analysis (CMA)	Pass (arr(X,Y)x1,(1-2)x2)	p27	20210608
Stem Cell Marker Expression			
· AP staining	Pass (Positive)	p24	20210511
· ICC	Pass (Positive)	p24	20210518
· qRT-PCR	Pass (Positive)	p24	20210525
Differentiation Marker Expression			
· EB formation	Pass (EB14d)	p24	20210528
· qRT-PCR	Pass (Positive)	p24	20210601
HLA genotype	HLA-A *24:02 *33:03 HLA-B *54:01 *58:01 HLA-DRB1 *04:05g *13:02	p30	20140704
ABO genotype	OO	p30	20140703
Teratoma formation	Pass (Three-germ layer)	p26	20141017

*- Freezing media : Stem-cellbanker (AMSBIO, 11897)

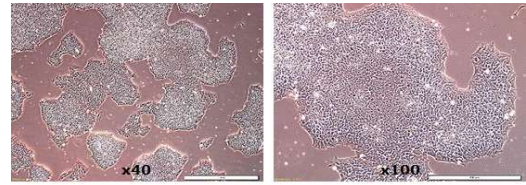
Cell Culture Condition	
· Feeder matrix	Vitronectin (Gibco, A14700)
· Media	TeSR-E8 (Stem Cell Technol, #05990)
· Culture plate	T25/T75 flasks
· Passage (Cell dissociation)	0.5mM EDTA

Mycoplasma contamination test



M. Marker
 1. Negative control
 2. Positive control
 3. SNUhES31

Cell attachment



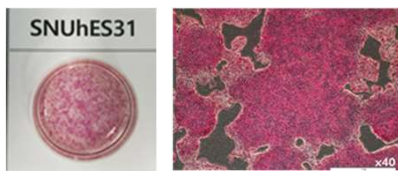
Microbial contamination test

항생제감염검사	항생제감염검사
검사번호: 2013000001 검사일자: 2013.01.15 검사시간: 14:30 검사장소: 검사실 검사방법: 배양 검사결과: 음성	검사번호: 2013000002 검사일자: 2013.01.15 검사시간: 14:30 검사장소: 검사실 검사방법: 배양 검사결과: 음성

Karyotype

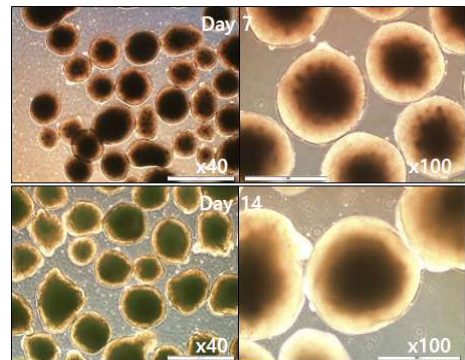
Cytogenetic Analysis Report	Cytogenetic Analysis Report
검사번호: 2013000001 검사일자: 2013.01.15 검사시간: 14:30 검사장소: 검사실 검사방법: 핵형분석 검사결과: 46, XY	검사번호: 2013000002 검사일자: 2013.01.15 검사시간: 14:30 검사장소: 검사실 검사방법: 핵형분석 검사결과: 46, XY

AP staining



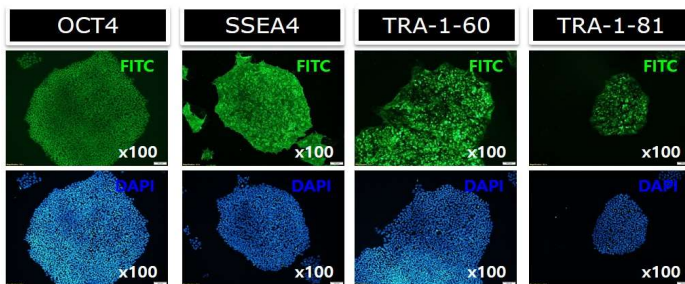
Differentiation

<EB formation 14day>



Stem cell marker gene expression

<ICC>



<qRT-PCR>

Gene	Ct Mean
PAX6	22.057
NR2F2	28.273
EMX2OS	26.259
T	34.848
HAND1	32.830
ITGA8	31.838
HNF3b	34.978
AFP	40.000*
IHH	34.147
GAPDH	17.280
ACTB	17.989

* Undetermined는 40.000으로 표기

<qRT-PCR>

Gene	Ct Mean
NANOG	22.597
POU5F1(OCT4)	27.638
SOX2	25.000
TERT	26.968
TDGF1	19.948
DNMT3B	22.207
GABRB3	23.294
GDF3	27.582
REX1	24.400
GAPDH	19.307

Teratoma formation

